

**PHASE III ARCHAEOLOGICAL INVESTIGATIONS
AT 38FL2, THE FLORENCE STOCKADE,
FLORENCE, SOUTH CAROLINA**

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MANAGEMENT SUMMARY

The Florence Stockade, an infamous Confederate prisoner of war camp, received its first prisoners on September 15, 1864. The prison covered approximately 23 acres south of Florence, South Carolina, and would house over 15,000 Union captives before it was abandoned in March of 1865. During this period, 2,800 of the prisoners died. The trenches in which most of them were buried were incorporated into the Florence National Cemetery, now controlled by the Department of Veteran's Affairs, National Cemetery Administration (VA). Today, the Florence National Cemetery contains approximately 9,000 interments and extends south of the original cemetery across National Cemetery Road.

With space in the existing cemetery quickly dwindling, the VA planned to expand the cemetery onto a 10-acre tract immediately to the south. Although it was known that the project area was adjacent to the site of the Florence Stockade, it did not encroach on the recorded boundaries of the site, 38FL2. Clearing of the property began in early 2005. The Friends of the Florence Stockade notified the VA and the South Carolina State Historic Preservation Office (SHPO) of the potential historic importance of the proposed expansion area. As a result, TRC was hired by MACTEC Engineering and Consulting (MACTEC) to conduct Phase II archaeological testing of the area, which indicated that the area may have been used in the support of the Stockade in some capacity.

Based on the results of the archaeological testing and TRC's preliminary historical research, MACTEC was contracted by the VA to conduct a Phase III archaeological data recovery on the portion of site 38FL2 lying within the expansion area. Field work began on April 17, 2006 and was completed on August 8, 2006. The field methodology included the removal of the plow zone from nine acres of the 10-acre area, with limited excavation of the remaining acre. Exposed features were then recorded and a sample of them excavated. As a result, 372 previously unrecorded features were identified, for a total of 521 features when combined with those recorded during the Phase II testing. Of these, 179 features were excavated. A wide variety of feature types were recorded, including structures, trenches, privies and slit trenches, wells, pits, posts, trees/disturbances and prehistoric pits. From these features, 5,828 historic and 228 prehistoric artifacts were recovered.

Based on the feature types identified and the artifacts recovered, it was apparent that the project area encompassed a portion of the camp of the Confederate soldiers charged with guarding the stockade. This was further indicated by the extensive documentary research conducted during this project. It appears that the eastern end of the camp was encountered, while more of it may extend off of the property to the west. The excavations at the Florence Stockade represented a rare opportunity to examine a relatively undisturbed Confederate camp inhabited for a short period of time by rear-echelon personnel. While a great deal of historical research has focused on the Stockade, this project represents one of the first professional studies of the day-to-day life of the guards.

ACKNOWLEDGEMENTS

The success of any major archaeological project is dependent on many people. The excavations at the Florence Stockade were certainly no exception, and the list of individuals and organizations that have contributed is extensive.

Ms. Lu Richards of the National Cemetery Administration, Veteran's Administration, served as our client contact and was vital in coordinating our efforts with the Florence National Cemetery.

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Management of a project such as this is no small task. MACTEC project management was provided by Allen Conger, along with Eduardo Padron and Jerry Archer. A special thanks goes to Roger Franklin, who had the foresight to help our program grow.

We were fortunate enough to be assisted by an exceptional heavy equipment operator. John Clauser of Of Grave Concerns has over 30 years of experience as an archaeologist and provided not only his skills as an operator but sage advice when requested.

The one thing that a field director must have for a project to be successful is a good crew. Our crew was excellent. They worked extremely hard and did great work through days on end of extreme heat. The crew included Mandy Edwards, Cody Howard, Dan Marcel, Colleen McConnell and Brady Witt. Their contribution can not be overstated.

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Finally, John Mason, Senior Geologist with MACTEC in Knoxville and avid student of Civil War history, shared his extensive library of sources on the material used during the war. His books and his expertise allowed for the identification of many artifacts that might have gone unknown otherwise. His generosity was truly appreciated.

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CHAPTER 1. INTRODUCTION

In September 1864, the Confederate Army found itself in a crisis. General William T. Sherman and his Union forces were rapidly approaching Atlanta, Georgia, which put them within range of Camp Sumter, the prison camp located in Andersonville. To avoid having the more than 30,000 Union prisoners held at Andersonville freed by the advancing Union troops, the Confederate government evacuated the prison. Those who were well enough to travel were sent to either Savannah, Georgia or Charleston, South Carolina.

Without the necessary facilities in either location to house the prisoners, it became apparent that a new prison would be needed. The small town of Florence, South Carolina was chosen as the location for the new prison. Florence was located at the junction of three rail lines which provided the necessary transportation to bring men and supplies to the prison. More importantly, it lay deep inside the Confederacy, far from the front lines of the war. Due to the low cost and ease of construction, a stockade was planned for the form of the prison. The stockade constructed at Florence was almost identical to the one at Andersonville, with log walls, corner platforms for artillery pieces and a stream running through the center. Construction of the 23-acre stockade had just begun when the first prisoners arrived in Florence on September 15. By the time the prison was abandoned in March 1865, over 15,000 prisoners had been housed there. Of these, nearly 2,800 died in captivity.

The burial trenches of the Union soldiers that died at the Florence Stockade were located approximately a quarter of a mile north of the stockade. These trenches formed the nucleus of what is now the Florence National Cemetery. Today, the National Cemetery is the location of approximately 9,000 interments of soldiers who served in every conflict since the Civil War. The facility is managed by the National Cemetery Administration (NCA) of the Department of Veteran's Affairs (VA).

Today, the Florence National Cemetery occupies two tracts just southeast of downtown Florence, South Carolina (Figure 1). The tract containing the original burials of the Union prisoners is located north of National Cemetery Road while the more recent addition to the cemetery lies on the south side of the road. The newer portion of the cemetery is bound on the west by a State of South Carolina-owned mental health facility and on the east by Stockade Road. National Cemetery Road forms the northern boundary while a parcel owned by the City of Florence is located to the south. The parcel owned by the city is the former location of the western half of the stockade.

With the rapid loss of World War II veterans and the aging of the Korean War and Vietnam War-era veterans, the new portion of the Florence National Cemetery has filled rapidly. To allow for the continued interment of veteran's and their dependents, the NCA plans to expand the cemetery onto a 10-acre tract south of the existing burial ground. Plans include the construction of a new road, installation of stormwater and landscape infrastructure and thousands of new burial plots.

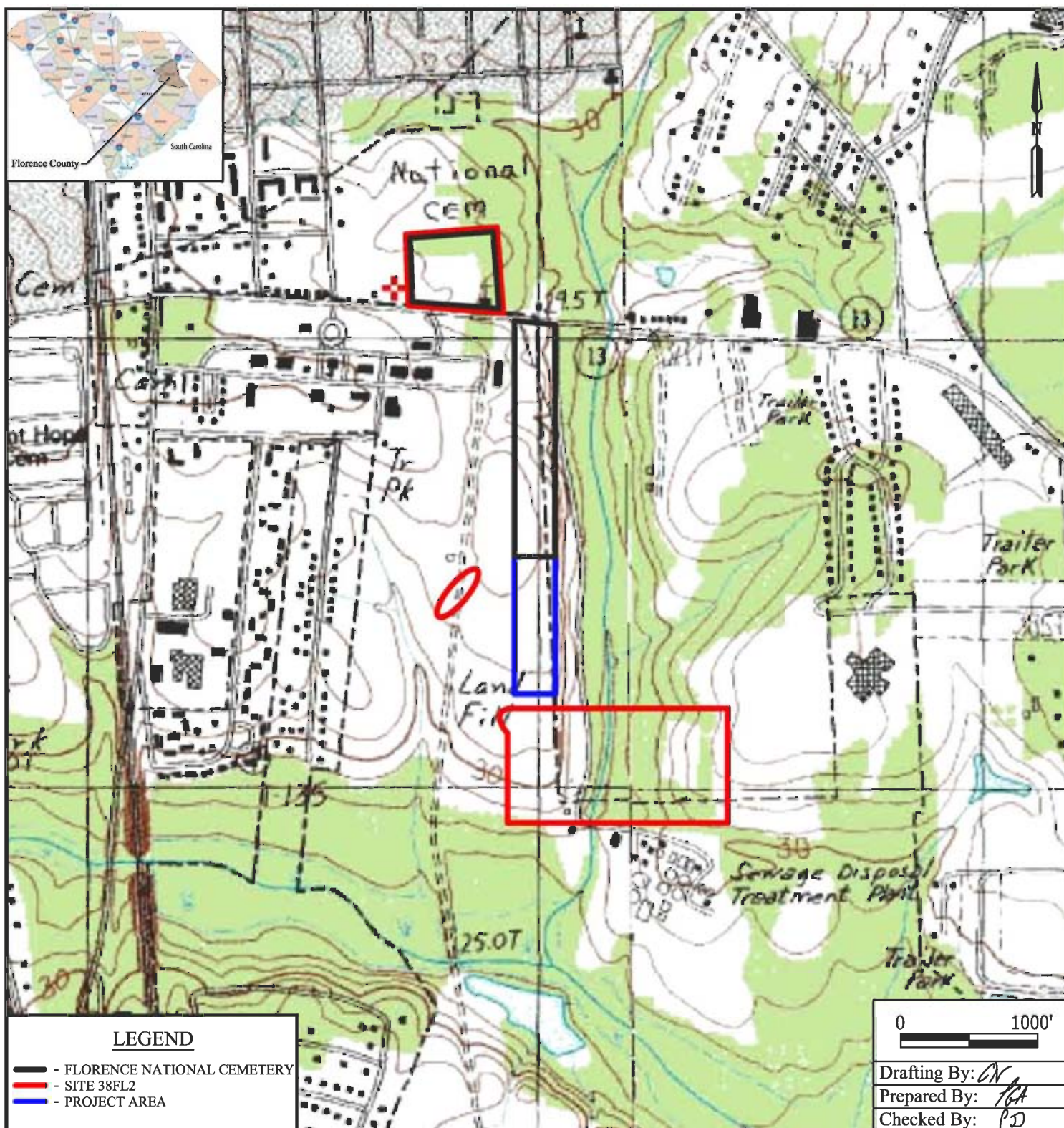


Figure 1. Project location map.

Although the expansion area did not actually cross the boundaries of any known cultural resources, the southern limits of the expansion were very near the northern boundary of Site 38FL2, which includes the location of the Florence Stockade (Figure 2). It was known from collectors and local interested citizens that the expansion area likely contained intact archaeological features related to the stockade. Therefore, the planned construction was considered to be a Federal undertaking and archaeological testing followed by data recovery was required under Section 106 of the National Historic Preservation Act.

The Archaeology of Civil War Prisons and Encampments

The focus of the excavations at the Florence Stockade site on the campground of the Confederate guards makes this project unique in the archaeology of the Civil War period. Archaeological projects at Confederate prisons have focused almost exclusively on the subject prison or prisoners (Prentice and Prentice 2000, Thoms 2000) while few investigations of campgrounds have been of those inhabited by Confederate troops (Balicki 2006, Reeves and Geier 2006). However, this previous work was vital in providing a framework for this project and a fuller context within which to view the results. With that in mind, a brief description of selected projects on prisons and campgrounds is presented here. It should be noted that this is not, nor is it intended to be, a comprehensive discussion of Civil War camp or prison archaeology. Instead, it is presented simply as an overview of selected projects representative of current work in this field.

The site of Andersonville Prison in central Georgia became a National Historic Site in 1971. Archaeological research on the prison began shortly thereafter when Larson and Crook (1975) identified portions of the stockade walls, as well as the northeast and northwest corners of the inner stockade. Research continued in 1978, concentrating on several areas within the stockade as well as the hospital area (Ehrenhard 1985). In 1985, an unsuccessful effort was made to use electrical resistivity to locate features related to the prison hospital (Marrinan and Wild 1985). Subsequent work took place in 1987, 1989 and 1990 which identified the location of the northeast corner (Walker 1989), the north gate (Prentice and Mathison 1989), the southeast corner (Prentice and Prentice 1990), a portion of the deadline, a collapsed escape tunnel and other features related to the construction of the stockade (Prentice and Prentice 2000). According to historical records, the stockade at Florence was constructed in a manner very similar to Andersonville. The research conducted by Prentice and the others provides a clear representation of what would be expected should excavations take place at the Florence Stockade.

Camp Ford, another Confederate stockade, was investigated by Dr. Alston V. Thoms (2000) of Texas A&M University and a large team of archaeologists, students and volunteers in 1997 and 1998. While Camp Ford was also a stockade, it was constructed on a hill side near Tyler, Texas, a very different topographical setting from either Florence or Andersonville. Thoms and his team combined mechanical and hand excavation with remote sensing to identify a large number of features within and outside the stockade. While several styles of shelter were noted inside the stockade, only one possible pit house was located immediately adjacent to one wall of the stockade.



Figure 2. Oblique aerial photograph of the project area.

From the fall of 1861 until the spring of 1862, a mix of Confederate Army and Navy artillerists in Virginia attempted to prevent the Union supply vessels from sailing to or from Washington, D.C. on the Potomac River. In response, the U.S. Army placed artillery batteries on the opposite shore of the river in Maryland. A constant but largely futile artillery duel ensued, with neither side having guns with sufficient range to inflict serious damage on the other. The soldiers detailed to the Potomac batteries were housed in a large cantonment located just out of range of the Union guns. Archaeologists with John Milner Associates investigated the cantonment starting in 2001 (Balicki 2006). They identified four separate camps which included 697 features interpreted as winter huts. A difference in the degree that military regulations were followed was noted depending on whether the camp was planned by an infantry or naval officer, with infantrymen more closely adhering to the official plan. Milner's combined use of in-depth historical research and intensive field work well adapted to the conditions provided an excellent record of a very complex site (Balicki, et al. 2002, Balicki, et al. 2004).

Another large winter encampment of the Confederate Army was located in Orange County, Virginia, by the Montpelier Archaeology Department and further investigated by them in conjunction with James Madison University and the State University of New York at Potsdam (Reeves and Geier 2006). Historical research revealed that the camp was occupied during the winter of 1863-1864 by a brigade of South Carolina infantry under Brigadier General Samuel McGowan as part of Lee's Army of Northern Virginia. The area was never plowed following the abandonment of the camp, so many features were visible from the surface. Approximately 125 depressions thought to represent huts were recorded, along with hearths and latrines. The camp was found to have been laid out according to military regulations along company streets. Four huts were excavated, with one producing a significantly higher number of ceramic vessels and clothing related items than the others. This feature was interpreted as the abode of an officer.

A wide variety of Union camps have been the subject of archaeological study, ranging across the country from Missouri (Garrow, et al. 2000) to east Tennessee (Bentz and Kim 1993, Creswell 1998). The best known Union camp investigated in South Carolina was located on Folly Island southeast of Charleston. In 1987 and 1988, the South Carolina Institute of Archaeology and Anthropology investigated four sites on Folly Island, each of which represented a different activity area within the overall island camp (Legg and Smith 1989). The island was the home of two regiments of free black soldiers during the siege of Charleston. The site of a regimental cemetery containing two complete burials of black soldiers was recorded, along with a possible sutler's camp, an area used for wells, then reused for latrines and an area of unknown function rounded out the sites. The work at Folly Island represented the first detailed, professional excavation of a Union military camp in South Carolina.

Site 38FL2

The site of the Florence Stockade was originally recorded as an archaeological site in 1970 based solely on artifact collections and historical documentation held by the Charleston Museum (Institute of Archeology and Anthropology 1971). The site

boundaries of the time are not known, but likely included only the portion of the Stockade east of Pye Branch where remnants of the walls were still visible. This portion of the Stockade was nominated to the National Register of Historical Places (NRHP) in 1974 and was listed in 1980. The site boundaries were amended to include the western end of the Stockade and a small portion of a ditch in 1992. This addition was based solely on the location of these components on an early 20th century plat map. The site was mentioned in a survey report for a road project (Roberts 1993), but was not investigated.

The first formal archaeological investigation of the site occurred in 1997 when Dr. Jonathon Leader of the South Carolina Institute of Archaeology and Anthropology (SCIAA) conducted a short investigation of the west side of the stockade. The property was (and is currently) owned by the City of Florence, who was considering developing the property as a park. Surface preparation of the area in April 1997 revealed prison-related features and artifacts. Dr. Leader was brought in to determine whether or not the stockade had in fact been located in this area and, if so, what portion had been there. He was also asked to determine whether or not archaeological features were likely to remain below the plow zone (Leader 1997).

Dr. Leader and a team of volunteers began their fieldwork on June 9, 1997. Their first step was to extrapolate the location of the northwestern corner of the stockade based on the remnants of the stockade walls located east of Stockade Road. After marking this point, they utilized mechanical stripping to remove the remaining plowzone, which revealed the trenches for the north and west walls as well as the support structure for the gate and associated artillery emplacement. When the project ended on June 12, Dr. Leader's team had proven that the stockade had indeed extended onto the project area and that significant subsurface features were still present despite surface disturbance (Leader 1997).

The next professional archaeological research on site 38FL2 occurred in 2005 when the NCA began clearing the property in order to expand the cemetery. Although the area slated for expansion did not lie within the boundaries of the site as recorded, its location just north of the western half of the stockade along with known historical references to camps outside of it indicated that archaeological resources could be located within the area of concern. A group of concerned citizens, the Friends of the Florence Stockade (FOS), notified the NCA and the SHPO of the potential historic importance of the expansion area. In response, the construction work was halted, although the surface of the area had already been cleared. TRC was hired as a subcontractor to MACTEC to conduct the Phase II archaeological testing of the area, which began in May 2005 (Grunden and Holland 2005).

Given the nature of the deposits likely to be encountered, TRC opted to use mechanical plow zone removal and metal detection in conjunction with historical research to evaluate the site. A series of trenches measuring 2.5 meters (m) wide by approximately 36m long were excavated east and west from a north-south line located near the centerline of the project area. The trenches were spaced 20m apart, with the trenches offset 10m on either side of the centerline. Each trench was excavated to the base of the plow zone and then

scraped with a shovel to reveal possible features. Forty trenches were excavated resulting in the identification of 149 possible features (Grunden and Holland 2005).

TRC fully or partially excavated six possible features. Feature 18 produced one prehistoric ceramic sherd and several bits of burned clay. It was interpreted as a possible Woodland daub processing pit. Features 95 and 151 contained Civil War-period artifacts and were interpreted as pits related to the camp. Feature 95 was only partially exposed, but contained the remains of one individual. Only the lower half of the skeleton was exposed, so little information on the individual could be obtained. The recovery of a Prosser button indicated that this was a historic-period interment. The remains were photographed, mapped and inventoried, then left in place and covered over with plastic and soil (Grunden and Holland 2005).

Based on their historical research, the features recorded and the artifacts recovered, TRC interpreted the project area as a camp ground for a portion of the Confederate guards or possibly a unit of Union prisoners who swore allegiance to the Confederacy (“galvanized Yankees”) known to have camped outside the stockade. They also noted that the number of features interpreted as pits was nearly twice as high on the western side of the project area than the east. This was attributed to either differential uses of those areas or simply sampling error. TRC recommended that adverse effects to the site be mitigated through excavation or preservation in place. Their efforts proved that this portion of the site contained “tremendous archaeological and historical potential” (Grunden and Holland 2005:36) and provided the starting point for the research that would soon follow.

MACTEC’s efforts on the Phase III mitigation began in February 2006 with the preparation of a detailed research design, which led to a Memorandum of Agreement (MOA) between the VA, the South Carolina State Historic Preservation Office (SHPO) and the Friends of the Florence Stockade (FOS). The FOS is a local citizen’s group originally formed to purchase the property east of Stockade Road where the remains of the stockade are located. Field work began on April 17, 2006, and was completed by August 8. Paul G. Avery, RPA, Project Archaeologist with MACTEC served as Field Director, while Patrick H. Garrow, RPA, Principal Archaeologist with MACTEC served as Principal Investigator. Mr. Avery was assisted in the field by a crew of five technicians including Mandy Edwards, Cody Howard, Dan Marcel, Colleen McConnell and Brady Witt. Mechanical excavations were performed by John Clauser, retired archaeologist from the North Carolina Office of State Archaeology. Processing of the materials and artifact analysis were conducted by Chad Caswell, Dan Marcel and the authors. Specialized analyses were conducted by Judith Sichler, PhD (faunal), Kandace Hollenbach, PhD (botanical) of the University of Tennessee’s Archaeological Research Laboratory (ARL) and Nicholas Herrmann, PhD (human remains), also of ARL.

The research design presented specific questions that guided both field and laboratory efforts. These questions were prepared based on the existing knowledge of the history of the site, the results of the Phase II archaeological testing, and on the body of archaeological knowledge of similar sites. One of the major goals of this project was to

gather historical and archaeological information on the support structure for the Florence Stockade and to assemble data on installations and encampments for Confederate rear echelon personnel that can then be used in the future for comparative purposes with similar Union facilities. The following questions were intended to address this goal.

1. What was the nature of the occupation of the study property? Was the property used to house direct support structures for the stockade such as the commissary, was it alternatively used to house camp guards, or was it used for both purposes?
2. What can be determined about the day-to-day life of the Confederate guards and support personnel and indirectly about the lives of the prisoners from evidence found within the study property?
3. What types of arms and equipment were being provided to Confederate camp guards at this stage (1864-1865) of the Civil War?
4. What types of foods were being provided to the camp guards versus the starvation diet documented for the camp prisoners?

It was anticipated that subsequent burials would be encountered beyond the individual exposed in Feature 95. The following questions were used to guide the research conducted on the burials.

1. Were the persons interred on the study property most likely to have been Union soldiers, Confederate soldiers, or slaves? The question of Union soldiers versus slaves will be complicated by the fact that by 1864 the Union Army included large numbers of freed African-American slaves.
2. Are the graves within the study area part of the first cemetery at Florence Stockade or did they represent interments made in an area not recognized as a formal cemetery that was used either for a short period or periodically through the history of the stockade?
3. Are traumas present on the skeletons that could represent healed injuries or injuries that were the cause of death?

One feature excavated by TRC during the Phase II testing was interpreted as a prehistoric pit. It was unclear whether this feature represented a major site component or was an isolated occurrence. Research on any prehistoric components was guided by the following.

1. What was the nature of the prehistoric occupation of the study area? Was the property used for temporary camp sites or was the occupation(s) more substantive?
2. When was the property used by prehistoric groups? Is the occupation single component or multicomponent?

3. What lithic raw materials were used by the group or groups that utilized the study area, and how does the choice of lithic material reflect the territorial range or ranges of the group or groups that used the property?
4. What can be learned about the subsistence patterns of the group or groups that utilized the study area?
5. If ceramics are present, how do they compare to known prehistoric ceramic components in the area?

Site Description

Since the departure of the Confederate Army in 1865, the subject property has been utilized strictly for agricultural and silvicultural purposes. The property was part of a 121-acre tract owned by the Northeastern Railroad during the time that the stockade was in use. The property was sold to Henry Walters in 1895 who in turn sold 111-acres, including the current project area, to the Atlantic Land and Improvement Company in 1907. That same year, the state of South Carolina bought the entire tract for the location of the South Carolina Industrial School (SCIS), which served as a vocational school for boys. The school was converted to a state mental health facility in the 1970s and is still used for that purpose. The subject property was donated to the VA for the expansion of the national cemetery in 1992 (Grunden and Holland 2005). It apparently served as part of the working farm maintained by the (SCIS) and the southern portion was planted in pine trees at some point. This is evident from the presence of a large tract of pines in rows on the adjoining property to the west and from an aerial photograph taken in ca-2002 located at the Florence Airport general aviation terminal.

The 10-acre project area was relatively level, with a very slight rise to the northwest. At the time of this project, a construction road led onto the property from the flag circle at the southern end of the existing cemetery. This road was routed along the eastern edge of the property and led to a contractor's office trailer and then to the southeastern corner where the property line was marked by a fence. Utility poles were located along the eastern edge of the road. MACTEC's office and storage trailer was located adjacent to the construction contractor's after the area was stripped and cleared of features. The ground surface was variable with the location on the property. The northern-most portion of the project area, a 0.89 acre tract slated for immediate construction, was highly disturbed. The area had been stripped of vegetation and large trenches excavated for the installation of stormwater drainage pipes. The back dirt from this excavation had been stockpiled on the east side of this area along with large sections of pipe and other construction materials.

The northern two-thirds of the rest of the project area was covered by low grass and weeds (Figure 3). Evidence of significant surface disturbance was evident in the form of large spoil piles located along the eastern boundary of the project area as well as within the area itself. One of the construction contractors indicated that the area had been cleared prior to TRC's investigation using a bulldozer and a root-rake (Todd Parks 2006, pers. comm.). This clearing included the removal of scattered pine trees and brush. Evidence of this

would be noted across the site in the form of extremely deep plow scars and even bulldozer tracks in low areas. The southern third of the project area was also covered in low brush, but also retained isolated clusters of pine trees that the NCA indicated should be left in place for the proposed cemetery expansion. A grass covered access road ran along the fence that marked the southern property boundary.



Figure 3. Project area prior to excavation (4/17/06), facing south from the northern boundary of the study site.

We were informed that the area had been a favorite of local collectors using metal detectors, although the stockade area itself was more popular. One collector indicated that he had collected the property in the past, but had stopped once it was listed as a National Register property (J.R. Fisher, Pers. Comm. 2006). Others apparently halted their searching at the urging of the FOS. No evidence of looting was noted on the property area. It is unlikely that any commercially available metal detector could have penetrated the thick plowzone that protected the important features on this site or that collectors would have taken the time to dig through this mantle.

CHAPTER 2. METHODS

Historical Research

The historical research concentrated on the identification, location and analysis of primary and published resources. The primary repositories for information on the Florence Stockade were the South Carolina Archives (SCA) maintained by the South Carolina Department of Archives and History in Columbia and the Eugene N. Zeigler South Carolina History Room (SCHR) at the Florence County Library in Florence. The SCA holds a large collection of Civil War materials, including unit rosters, service records and a collection of materials specifically pertaining to the Florence Stockade. The SCHR maintains vertical files on the Stockade and has a collection of newsletters published by the FOS containing historical information.

The internet proved to be a vital tool in locating published sources and compilations of records not readily available from traditional sources. Once a source was identified, it was generally easy to either download the information or obtain a copy through purchase. The website maintained by the FOS (<http://home.att.net/~florencestockade/friends.htm>) has links to many other useful websites containing information on the Stockade and the troops stationed there.

Other sources of information included the War Between the States Museum in Florence, which has a collection of artifacts recovered from the Stockade area, and informant interviews. Interviews with members of the FOS were crucial to understanding the Stockade area and its more recent history. The Reverend Albert Ledoux, who has conducted extensive research on the Stockade and has identified many of the prisoners who died there, was helpful in sharing his resources as well.

Field

Fieldwork began with reestablishing the site grid used by TRC. The permanent site datum (1000N 1000E) was easily located near the southern boundary of the project area. Several of the flags used by TRC to mark the centerline of the area were relocated, but were found to have been shifted by subsequent activity on the site. The centerline was reestablished, which provided points from which to survey in the middle and northern portions of the area. All survey work was conducted using a TopCon GTS-212 total station and a TDS-148C/ST data collector.

With the knowledge that the site had been deeply plowed, it was decided that mechanical stripping of the plowzone and excavation of exposed features was the most efficient means of conducting the research. During the initial phases of the work, a backhoe fitted with a 36-inch smooth-bladed bucket was used to remove the plowzone while a crew member monitored its progress from a safe distance in front of the machine. Stripping was halted at the transition from plowzone to subsoil. While this method allowed for closely controlled removal of the plowzone, it became obvious after a few weeks that the

backhoe was not efficient enough to keep the project schedule. At this point, a trackhoe and a tractor-pulled pan were brought in to finish stripping the plowzone from the site. The trackhoe was used to move several large push-piles that had been left from the initial clearing of the site. The pan was then used to complete the plowzone removal. The pan was capable of removing very thin layers of soil, so it was determined that little if any more damage would be done to buried features than with the backhoe. As with the backhoe, the pan work area was monitored by an archaeological technician and excavation was halted at the transition between the plowzone and subsoil.

Regardless of the method used to remove the plowzone, once an area was cleared it was cleaned by shovel or trowel and examined for soil discolorations indicative of features. When features were identified, they were scraped by trowel to define the edges, photographed and the location recorded with the total station. Each feature was assigned a sequential number and a description was recorded in the field notes. The last number used by TRC during the Phase II testing was 155. To differentiate the features recorded by TRC from the ones recorded during the current project, numbering of newly recorded features began at 200. The field director then decided which features were excavated based on several factors, including size, perceived function, presence of artifacts, shape and the color of the fill.

Excavated features were either bisected or excavated in quarters, depending on its size. All of the soil from the first half of the feature was dry screened through ¼-inch hardware cloth. All of the artifacts recovered from the screen were placed in paper bags marked with the appropriate provenience information and retained for analysis. Each provenience was given an individual, sequential catalogue number which was recorded on a central catalogue list. Soils were removed from features in zones based on color and texture when possible. Five liter soil samples were retained from each feature for flotation. Samples of larger discrete zones were gathered for flotation when possible as well. Flotation samples were double-bagged in plastic trash bags with a tag bearing the provenience information. The bags were tied closed and another tag marked with the provenience tied around it. Profile drawings and photographs recording the internal stratigraphy of each feature were prepared prior to the excavation of the second half of the feature. Completed features were photographed and the depth and final shape were recorded using the total station.

Laboratory

All of the materials recovered in the field were returned to MACTEC's Knoxville, Tennessee laboratory for processing and analysis. The catalog number and provenience of each artifact bag were recorded upon arrival at the laboratory. The artifacts were then cleaned, either by dry brushing or washing with water as appropriate. The clean, dry artifacts were then sorted by material type and bagged in acid-free zip-closure bags marked with the catalog number and provenience.

Bags containing flotation samples were also checked in upon arrival at the laboratory. The soil samples were processed by MACTEC laboratory technicians using a Flote Tech

Model A flotation machine. The heavy fraction of the sample was gathered with one millimeter mesh while the light fraction was collected with 0.285 millimeter mesh. The entire sample of both the heavy and light fractions was retained for analysis. Both were allowed to dry thoroughly then bagged separately in acid-free zip-closure plastic bags marked with the provenience and catalogue number.

The preservation of ferrous metal artifacts was generally very poor, with many completely encased in oxidized metal and sand. Selected artifacts, particularly those deemed to retain their structural integrity were cleaned using electrolysis. Prior to being placed in the electrolysis tank, the artifacts were mechanically cleaned to expose as much metal as possible. The artifacts were allowed to stay in the tank as long as necessary to remove as much corrosion as possible. Heavily encrusted artifacts were mechanically cleaned on a daily basis during electrolysis to make the process as quick as possible. Some artifacts were removed early as it became apparent that they lacked the structural strength to be completely cleaned. After electrolysis, the artifacts were either thoroughly rinsed in hot water or soaked in clean water to remove salts absorbed from the electrolytic solution. Artifacts that were removed with areas of encrustation in place required longer soaking periods, and in some cases boiling, to remove the salts from the non-metallic material. Once the artifacts were cleaned and allowed to dry thoroughly, they were coated twice with Conquest™, a liquid rust converter containing tannic acid and a sealer that blocks oxygen from reaching the metal surface. On cleaned artifacts, this treatment leaves a glossy, black surface.

Analysis of the artifact collection from site 38FL2 concentrated on describing the material, method of manufacture, decorative technique, date range of manufacture and function of each item. The resulting data was organized following South's (1977) functional classification system, as modified by Garrow (1981), which allowed for intra-site comparisons of feature functions as well as comparison with collections from other similar sites. Other classification systems previously applied to military sites were considered (Legg and Smith 1989, McBride and Sharp 1991). Legg and Smith's approach to the collections from Folly Island is certainly appropriate to a site of this type, but was based on small samples from specific activity areas across the sites they investigated. South's system is intuitive and was deemed appropriate given the domestic function of the subject site, albeit a military camp.

South's (1977) classification system is organized around eight functional groups, including the Kitchen, Architectural, Arms, Clothing, Personal, Furniture, Tobacco Pipe and Activities Groups.

Kitchen Group

The Kitchen Group consists of those items used in the preparation, service, consumption and storage of foods and beverages. Ceramics, container glass, glassware, kitchenware and tableware are included in this group. Container glass associated with the storage of alcoholic beverages, medicines and household chemicals is also included as are metal cans.

Ceramics were identified by type, vessel form, vessel part, decorative technique, function and date of manufacture where possible. Ceramic types fall into one of two broad categories based on the level of vitrification of the clay used to form the vessel after firing. Earthenwares are fired at relatively low temperatures, resulting in a body that is permeable to liquids. To prevent this, earthenware vessels must be glazed. The paste ranges in color from white to red or other earth tones. Alternately, stoneware is a high-fired type which becomes highly vitrified, making it impervious to liquids. However, stonewares are typically glazed to strengthen the vessel and for aesthetic reasons. The paste is typically white or an earth tone, such as grey or brown (Worthy 1982).

Both earthenwares and stonewares were manufactured in refined and coarse forms. Refined earthenwares are typically white, with a clear alkaline or tinted lead glaze over a relatively smooth paste. Refined vessels were decorated using a number of techniques and were generally used as tablewares. Stoneware types include unrefined utilitarian vessels such as crocks, jugs, bottles and bowls, with gray or brown paste covered by a slip glaze, salt glazing or a combination thereof. In South Carolina, western North Carolina and eastern Georgia, a slip glaze made of a thin clay slurry mixed with wood ashes was a popular decorative technique. Known as alkaline glazing, vessels treated in this manner exhibit a glossy, grayish green surface. Alkaline-glazed vessels were generally produced in the potteries of the Edgefield district of South Carolina (Baldwin 1993).

Container glass is classified by color, vessel form, vessel part, decorative technique, date of manufacture and function. Sherds of glass can be very difficult to assign to a functional category or date unless they exhibit a manufacturing mark, maker's mark, a specific decorative technique, are from a specific vessel or are a specific color. Glass manufactured during the mid 19th century is typically a shade of green or blue depending on the additives or minerals included in the batch. Colorless glass does not become common until the early 20th century (Jones and Sullivan 1989).

Architectural Group

The Architectural Group is made up of those items necessary for the construction of structures, either domestic or utilitarian. Nails, bricks, mortar, window glass are included in this group. Nails were the most commonly recovered architectural artifact from this site. They are temporally diagnostic, but only in relatively broad periods of time. The method of manufacture and the metal used are the primary markers of when a nail was made (Jurney 1987, Mercer 1923, Sloane 1965), while size (penny-weight) and shape (rose-head, L-head, finishing) are often indicative of a specific function within a structure (Young 1991, Walker 1971).

By the mid 19th century, machine-made cut nails were the most commonly utilized type. Cut nails were literally cut from a sheet of iron, then were initially headed by hand. The first machines that manufactured a complete nail were developed in 1815, and by 1835 fully machine-made nails had largely replaced hand-headed varieties. Although cut nails are still manufactured for specific purposes, they were replaced in common usage by extruded wire nails by the end of the 19th century (Avery 2002, Jurney 1987, Sloane 1965).

Window glass is also an important architectural artifact that is common on many historical residential sites. For analytical purposes, all flat glass was assumed to be derived from windows unless this was obviously not the case. The thickness of each fragment was recorded to the 1/100th of a millimeter. This measurement can then be used to estimate the date of manufacture of a particular pane of glass. According to Moir (1987), window glass increases in thickness at a predictable rate through time. Therefore, the thickness measurement can be used in a regression formula to determine an estimated date of manufacture. This is true for glass manufacture before machine-made plate glass became common in the early 20th century.

Arms Group

The Arms Group includes any item related to firearms as well as other weapons, hunting equipment and military accoutrements. Ammunition components, such as bullets, primers and cartridge cases, edged weapons, such as bayonets, and other military issue items, such as canteens have been included in this group. Bullets were described by shape (conical or round) and caliber. Based on these characteristics, an effort was made to determine what type firearm would have used that particular ammunition. Bayonets were identified by model number and for which gun they were designed. Other military issued items were described and identified by model number as appropriate.

Clothing Group

The Clothing Group consists of buttons, buckles and any other item worn on the body. This group also includes artifacts such as pins and needles used in the manufacture and maintenance of clothing items. Buttons were identified by type, material and manufacturer if marked. The diameter of each was also recorded in millimeters. The affiliation (Union or Confederate) was determined for military buttons based on emblems or manufacturer.

Personal Group

The Personal Group includes items carried on the person or belonging to one specific individual. Grooming items, writing implements and currency are examples personal items.

Furniture Group

The Furniture Group includes items associated with the furnishing of a dwelling, such as kerosene lamp bases and chimneys, upholstery tacks, drawer pulls and decorative items.

Tobacco Pipe Group

The Tobacco Pipe Group consists of any part of a tobacco pipe and other smoking-related products. Pipes were described based on type, material and decoration.

Activities Group

The Activities Group serves as a “catch-all” category. It includes a wide variety of items such as construction tools, farm or gardening tools, fencing, miscellaneous hardware and any other item that does not fit within one of the above groups. As most of these items are task-specific, this group can be useful in determining the function of specific areas of as site.

Analysis of Botanical and Faunal Remains

It was expected that relatively few botanical or faunal remains would be recovered from the site. Therefore, the scope of work called for the analysis of food remains from fifteen samples. The sample proveniences were chosen to represent a variety of feature types from a discrete area of the site. The proveniences chosen were located in Block A in northern portion of the site and were recovered from both dry screening and flotation. The specific analytical methodology is described in Chapters 7 (Faunal) and 8 (Botanical).

Artifact Curation

The artifacts were prepared for curation in general accordance with *South Carolina's Curation, Access and Loan Policy* (South Carolina Institute of Archaeology and Anthropology [SCIAA] 2005). The facility to be charged with the permanent curation of the collection has not been selected, as it is to be negotiated between the VA and the signatories to the Memorandum of Agreement. The only facility available in the state of South Carolina is maintained by SCIAA in Columbia. This would be the logical choice to house the collection.

Spatial Data

Over 2000 mapping points were recorded from across the site with a TDS-148C/ST data collector. This data was downloaded onto a laptop computer every night using ForeSight DXM. Upon returning to the office between shifts in the field, the data was transferred to MACTEC's central server using the same software. For analytical purposes, this data was then transferred to a Microsoft Excel spreadsheet and the points plotted using Surfer 8.0. Features were then examined by type as to their location relative to other features, size, shape and orientation. Patterns and alignments of specific feature types were noted as well.

CHAPTER 3. PREHISTORIC AND HISTORICAL CONTEXT

The Florence Stockade site derives its historical significance primarily from the historic use of the site as a Confederate prisoner of war camp. However, Phase II archaeological testing of the site also revealed the potential for prehistoric activity, and prehistoric features and artifacts were encountered during the current project (Grunden and Holland 2005). Therefore, a short prehistoric cultural context is presented below. This is followed immediately by the results of the extensive historical research that was conducted as part of this project. The general history of the region has been presented in Grunden and Holland (2005:9-10) and is not discussed in this section.

Prehistoric Context

Paleoindian Period (12,000-10,000 BP)

The earliest known human occupation of the South Carolina Coastal Plain occurred during the Paleoindian Period at the end of the Wisconsin glacialiation. This period is not clearly understood in eastern South Carolina, as very few sites are known. Diagnostic Paleoindian period materials recovered in this region have been surface finds, as no well-defined, stratified sites have been reported in the literature (Anderson 1995). Artifacts typically associated with this period include lanceolate fluted and unfluted basally ground projectile points, and later, the Hardaway-Dalton complex projectile points. These materials are generally found in upland contexts or along stream terraces. Many sites may currently lie at the bottom of the ocean, as the coastline may have been as much as 300 miles east of its current location (Phelps 1983). Paleoindian social organization has long been characterized as consisting of small, highly-nomadic bands of hunter-gatherers, subsisting primarily on Pleistocene megafauna. According to Phelps (1983:22), “The subsistence strategy may have been generalized hunting and gathering or may have emphasized the hunting of larger animals as in the classic model, although a combination of these strategies seems most plausible.” As the climate changed and the megafauna began to be replaced by more modern mammalian species, it is likely that the focus of subsistence changed to the gathering of more plant materials and hunting white-tail deer and small game (Anderson *et al.* 1992).

Archaic Period (10,000-3,000 BP)

The Archaic Period, which immediately followed the Paleoindian period, is divided into the Early (10,000-8000 BP), Middle (8000-5000 BP) and Late (5000-3000 BP) sub-periods. These divisions are based on climatic and technological changes. The Early Archaic period corresponds to a shift from a cold to a cool, moist climate. The climate became drier and warmer during the Middle Archaic, and reached essentially modern conditions by the Late Archaic. The overall subsistence patterns are also related to the climate, as the remaining Pleistocene species were replaced by modern species and the gathering of wild plant foods increased in importance to growing populations (Chapman 1985).

The Early Archaic is characterized by the continuation of a hunting and gathering subsistence strategy that focused on a more generalized forage base made possible by the tempering climate. An increase in the number of food storage and preparation features indicates that a shift to a more localized subsistence area was taking place during the Early Archaic (Chapman 1985). The characteristic lithic tool of this time was the Kirk Corner-Notched projectile point, with a transition to the Kirk Stemmed by the end of the period. Other lithic tools, such as scrapers, blades and drills, closely resemble those found in Paleoindian period contexts.

The Middle Archaic is marked by the warming climate of the Hypsithermal and the transition from pine-birch-hemlock to more modern oak-hickory forests, which further increased the available forage base. An apparent increase in population is indicated by a larger number of recorded sites. In fact, Middle Archaic sites are the most commonly recorded site type in South Carolina (Blanton and Sassaman 1989). Diagnostic projectile points for the Middle Archaic include the Stanly, Morrow Mountain and Guilford clusters (Taylor et al. 1984), while fewer formal lithic tools are found than in Early Archaic contexts.

The Late Archaic is characterized by a shift in the location of large sites to the floodplains of major rivers with smaller sites dispersed across the landscape. That was coupled with an increase in population and sedentism timed with the onset of essentially modern climatic conditions. The culture of the Late Archaic appears to be fairly homogenous and includes the Savannah River phase. The primary indicator of the Savannah River phase is the broad, square-stemmed projectile point of the same name. Other items included pecked or ground stone implements such as axes, net sinkers and atlatl weights. Steatite vessels were introduced, but the introduction of ceramic pottery marked the beginning of a major technological shift. Fiber-tempered ceramics appear in the southern Coastal Plain during the Late Archaic and quickly spread. A sand-tempered variant, Thoms Creek, is common in Late Archaic contexts in South Carolina (Sassaman 1993).

Woodland Period (3000-1,000 BP)

The Woodland period is marked by changes in settlement and subsistence patterns, technology and social organization. Ceramic types increased in number and became more varied as to temper and decorative technique. The bow and arrow was introduced during the Late Woodland period, and extensive trade networks were established. The Woodland period ended with the appearance of European settlers. For the South Carolina Coastal Plain, the Woodland is further divided into three sub-periods: Early (3000-2600 BP), Middle (2600-1200 BP) and Late (1200-1,000 BP) (Cable et al. 1998; Steponaitis 1986).

Early Woodland Period settlements typically took the form of small, seasonal camps in the uplands at springheads or confluences of small streams and small camps at swamp edges (Trinkley 1990). Larger sites on swamp edges are thought to represent semi-permanent settlements (Trinkley 1990). Early Woodland material culture included ceramics with sand or grit temper and surface decorations such as cord marking, fabric marking, net impressing, simple stamping, check stamping and complicated stamping. The most common vessel forms were jars with a conical shape and bowls (Anderson and Joseph

1988; Trinkley 1990). Diagnostic point types included the Badin Triangular, Gypsy Stemmed, Roanoke Large Triangular and Swannanoa Stemmed (Trinkley 1990).

The Middle Woodland Period continues many of the same practices of the Early Woodland Period. Subsistence strategies remain the same, with the addition of maize to the cultivated plants. Settlement and camp locations are the same as in the Early Woodland Period. Structures and settlement size also continue in the same patterns as the previous period. The Middle Woodland also marks the beginning of the practice of constructing burial mounds. Steponaitis (1986) sees this as the beginning of ranked social status, fragmentary lineages, and possibly “big man” leadership. Burials are primary inhumations, secondary inhumations, or cremations with few grave goods (Trinkley 1990). Material culture includes ceramics which are sand, grit, or sherd tempered. Surface decorations can include brushing, cord marking, fabric marking, net impressing, simple stamping, check stamping and complicated stamping. Tetrapodal supports may be present (Trinkley 1990). The most common vessel forms are jars with a conical shape and bowls (Anderson and Joseph 1988). Roanoke Large Triangular and Yadkin Large Triangular projectile points are typically associated with Middle Woodland occupations.

The Late Woodland Period can in many ways be characterized as a continuation of Middle Woodland practices. Patterns of hunting and plant processing continued as they had when they were established in the Early and Middle Woodland (Cable et al. 1998; Steponaitis 1986; Trinkley 1990). Maize agriculture was well established by this period, but settlements remained small. Preferred locales were semi-permanent sites on swamp edges (Trinkley 1990). Burial practices continue in the form of sand burial mounds (Cable et al. 1998; Trinkley 1990).

Mississippian and Protohistoric Periods (500-200 BP)

The Mississippian is distinguished from the earlier Woodland in the Southeast by the appearance of platform mounds and a subsistence pattern based heavily on cultivation of corn, beans, and squash among other cultigens. Little is known about the transition from the Late Woodland to the Mississippian on the Coastal Plain of South Carolina, but this is true for much of the Southeast (Garrow 2002). Mississippian settlement patterns included large sedentary villages resulting in large political centers such as those located at Town Creek in North Carolina, on the Wateree River in South Carolina and on the Oconee and Savannah Rivers in Georgia (Coe 1995, DePratter 1988).

Savannah Period sites commonly mark the Early Mississippian over much of South Carolina and Georgia (Caldwell and McCann 1941, DePratter 1979). Trinkley (1980, 1981a, 1981b) has proposed the Jeremy Complicated Stamped ceramic type that would date to the same period on the South Carolina coast. This has been called into question, however, by subsequent research that pointed out the difficulty in sorting Jeremy and Savannah types based on available descriptions (Commonwealth Associates 1982).

Savannah assemblages are replaced on the Georgia coast by Irene assemblages (Caldwell and McCann 1941) and by the closely related Pee Dee assemblages in South Carolina. Pee Dee sites are normally located in flood plains or on bluff tops adjacent to major rivers.

These sites include large ceremonial centers such as Town Creek in southern North Carolina, as well as smaller villages, hamlets and homesteads (Coe 1995). Later Ashley Complicated Stamped ceramics are thought to be diagnostic of the Protohistoric Period in the Florence County area (Commonwealth Associates 1982).

No artifacts diagnostic of the Mississippian or Protohistoric Periods were recovered during the current investigation and none were expected given the setting of the project area along a small stream.

Historical Context

Civil War Military Prisons

With the initial clash of the Union and Confederate armies at Bull Run in 1861, the problems with the military prison systems of both sides began to become apparent. Basically, the problem was that no system existed. Thinking that the war would be short and relatively bloodless, neither side had made any arrangements for confining, providing medical attention or feeding their captured enemies. As Speer (1997:xvii) stated, “the care and feeding of prisoners is, and always has been, the last concern-the least of any government’s worries-at the beginning of any war.” Initially, existing jails were used to house prisoners, but these became inadequate with the end of the battle at Bull Run. Large commercial buildings, such as tobacco factories and textile mills, were converted to prison space. These structures were not built with the comfort or sanitary needs of thousands of captives in mind, and quickly became breeding grounds for disease.

Until 1862, no formal system of exchange or parole for prisoners of war existed. Many field commanders, following customs from the American Revolution and the War of 1812, paroled their prisoners immediately following a battle. Each captured soldier signed an oath swearing that they would not take up arms again until formally exchanged and were sent home. However, this was not the official policy of either government and thousands of prisoners were sent to Richmond or New York, quickly overwhelming the existing facilities. New facilities were constructed or converted, but these were hastily constructed and were overcrowded almost as soon as they opened (Sanders 2005, Speer 1997).

Initially, the Lincoln administration refused to consider exchanges, for to do so would lend legitimacy to the Confederate government. The Federal government officially considered the war to be nothing more than an insurrection and had no desire to treat the Confederate States as another nation. But by early 1862, the press in the North and South began printing letters submitted by current and former prisoners relating their ordeals, which led to a general public outcry demanding a formal exchange policy. As a result, negotiations began between the two governments in early 1862 to draft a cartel of exchange. An agreement was reached on July 22, 1862 where a man-for-man and rank-for-rank exchange of soldiers could take place. A scale was established where men of higher rank could be exchanged for those of lower rank or vice versa. For example, a commanding general could be exchanged for 60 privates, while a second lieutenant was only worth three

privates. Soldiers that were not immediately exchanged could be paroled and sent home until they were officially exchanged on paper (Sanders 2005, Speer 1997).

With the initiation of the cartel of exchange, prisons on both sides began to empty. The process was slow and was hampered by governmental bickering from the beginning. The U.S. government refused to exchange raiders and guerilla fighters as regular army troops and threatened to hang them as traitors. The Confederate government responded by threatening to hang an equal number of Union prisoners. Union troops, taking advantage of the parole system began to allow themselves to be captured so that they could go home. When the Federal government realized this, they began keeping them in “parole camps” until they were exchanged. This did nothing but add to the difficulties of supplying their detainees.

By late 1862, the shaky cartel was doomed by Jefferson Davis’ decision to not exchange black soldiers captured while in service of the Union army. Davis contended that they were run-away slaves and were to be either returned to their masters or sold if their master could not be located. He further stated that any white officer captured in the command of black troops would be charged with leading a slave insurrection and was subject to hanging. In December 1862, US Secretary of War Edwin Stanton ordered that no commissioned officers were to be exchanged in response to Davis’ policy (Sanders 2005, Speer 1997). Exchanges of enlisted men continued until May 1863, when Stanton halted all exchanges, ending the cartel (Sanders 2005).

The exact reasons for the failure of the cartel are numerous and open to debate. In his work on Civil War military prisons *Portals to Hell*, Lonnie Speers (1997) argues that the Confederate refusal to treat black and white Union soldiers equally in terms of exchange value was largely responsible for the end of the cartel. Charles Sanders, in *While in the Hands of the Enemy* (2005), differs in his interpretation. He contends that Lincoln and Stanton were anxious for the exchange to end as the advantage in the number of prisoners held shifted to the North. It was only after the public demand for exchanges began again in late 1863 that the Lincoln administration seized on the issue of black soldiers as an excuse for ending the cartel.

Regardless of the reasons, the collapse of the cartel of exchange marked a turning point in the administration of the military prison systems of both sides and the lives of those unfortunate enough to experience them. As the existing prisons began to refill and new ones constructed, it became clear that the lack of a comprehensive plan for dealing with thousands of prisoners was a major problem. By the middle of 1862, the Union prison system had begun to centralize, although their facilities were scattered across the north and were still often insufficient. The Confederate prisons, however, continued to be administered in a purely reactionary manner. Every decision made regarding their prisons would be in response to a problem, or as Sanders (2005:7) put it, “they were reactive measures, promulgated in response to an endless series of crises or instituted in an effort to satisfy a constantly shifting set of military requirements and political agendas.”

One of the results of this lack of planning in the South was the use of open stockades as a primary form of prison (Speer 1997). These facilities were constructed by placing logs

vertically in a trench to enclose a large open area where the prisoners were kept. They were cheap to construct and required little in the way of building materials or time to build. They could be constructed almost anywhere that a large tract of land could be cleared, which became a very important consideration when Union forces began taking ground deeper in the South. Unfortunately, they offered no shelter to the prisoners and none was typically supplied by the Confederate government. Constant exposure to the elements in conjunction with limited rations of poor quality foods, lack of medical care and almost non-existent sanitation led to the deaths of thousands of Union soldiers, who were often wounded or battle fatigued when they were captured. Referring to Camp Sumter near Andersonville, Georgia, the most infamous Confederate prison, Speer (1997:259) states that the Southern stockades were “nothing more than concentration camps.”

History of the Use of the Florence Stockade

The Florence Stockade was built to house Union enlisted prisoners who had primarily been shipped east from Andersonville after the fall of Atlanta in early September, 1864. The prisoners were first shipped by rail to Charleston, where they were temporarily housed at the racetrack north of the city. The temporary quarters at Charleston were quickly filled beyond capacity, and smallpox, yellow fever, and other diseases began to spread among the prisoners. The commander in Charleston, Major General Samuel Jones, moved to resolve the overcrowding by ordering Major Frederick F. Warley to construct a prison at Florence. Warley assembled a work force of 1,000 slaves and began construction. The first shipment of prisoners arrived at Florence by rail well before the stockade was completed (King 1974:35-36).

The Florence Stockade was an expedient answer to an immediate problem. Florence was chosen as the prison site based on inspection of the area by an officer under the direction of Major General Samuel Jones on September 12, 1864. The decision to build the prison at Florence was based on the fact that the town was located where three railroads crossed, which would facilitate shipment of prisoners and supplies. A site southeast of Florence was chosen for the prison (Power 1991:3).

The ability of the Confederate supply system to provide rations for the prisoners to be housed at Florence was a point of concern from the beginning. Prior to the arrival of the prisoners, H.C. Guerin, “Major and Commissary of Subsistence”, wrote to Major Charles S. Stringfellow, Assistant Adjutant General in Charleston on September 14, 1864, and expressed his concern over the ability to collect enough rations “in time to prevent privation” for the Union prisoners. He recommended that the prisoners “gradually be sent forward” to alleviate that problem (Official Records of the War of the Rebellion [OR] II, VII 1902:825).

Guerin’s recommendation was not followed, and he dispatched Captain E.A. Rabb to Florence on September 17, 1864, to determine the best means of insuring adequate supply for the prison. He stated that he thought there was “a sufficiency of meat” to supply the prisoners, but that molasses was going to be in short supply. He recommended reducing the syrup ration to “one gill” [a quarter pint] until the supply could be improved. He

further recommended organizing the prisoners by thousands for distribution of rations (OR II, VII 1902: 838).

Captain Rabb's report was not found during this research, but an excerpt from the report was reproduced in a communication from John F. Lay, Assistant Adjutant and Inspector General, to Major Hutson Lee, Chief Quartermaster. That excerpt foreshadowed major problems that were to plague the stockade through its use (OR II, VII 1902:825).

I found them to be in a very destitute condition; they say they have been receiving enough to eat, but are entirely without cooking utensils. I would urge the necessity of furnishing them with cooking utensils, or if Florence is to made a permanent camp, I would recommend that cook-sheds (say one to every 1,000 men) be erected, and that a large boiler (say thirty gallons) with a baking arrangement attached be built under these sheds, and that the cooking be superintended by a man or men to be selected from the prisoners. I think a great quantity of meat might be saved by making this arrangement, by feeding them on soup.

Rabb's recommendations were not adopted.

The first prisoners were shipped to Florence on September 15, 1864, well before the stockade could be finished and before an adequate guard force could be assembled. Ezra Hoyt Ripple was among the first 1,500 prisoners sent to Florence, and he indicated that the first group had volunteered to go to Florence from Charleston. The prisoners were initially held in a cornfield surrounded by guards (Snell 1996:62) before being moved into the unfinished stockade on September 18 (King 1974:36)

The guard force at Florence was inadequate to deal with the prisoners that were gathering at the unfinished prison. The guards included boys and old men from the South Carolina Reserves, and just over one hundred guards were assigned to a prisoner force that began at 1,500 and rapidly increased. It did not take long for prisoners to take advantage of the weak guard force and attempt a mass escape. Major Warley was faced with a grave situation, and managed to get additional guard help from local citizens and a cavalry and an artillery unit (Power 1991:6).

The medical condition of many of the prisoners arriving at Florence was described as "deplorable". H. W. Feilden, Assistant Adjutant General at the Headquarters Department for South Carolina, Georgia, and Florida in Charleston, commanded Surgeon T. L. Ogler to immediately send two medical officers to Florence to report to Major Warley on September 17, 1864, but proper medical care was to remain a critical problem until the stockade was abandoned (OR II, VII 1902:837).

Major Warley was soon replaced at his request as the commander at Florence because of poor health. Warley had served in the 2nd South Carolina Artillery, and had been captured in Charleston Harbor on September 4, 1863, while en route from Battery Wagner to Charleston after sustaining an injury. Warley was incarcerated at Fort Delaware, which

was located on Pea Patch Island in Delaware Bay. Fort Delaware was considered by many to be one of the worst prisons in the Union system when Warley was there in 1863. Warley remained there until June, 1864, when he was paroled at Hilton Head Island (Speer 1997:46, 143; OR I, XXXV 1891:147-148).

The new commander at Florence was Colonel George P. Harrison, formerly the commanding officer of the 32nd Georgia Infantry. He apparently took command by September 20, 1864, and requested additional guards for the camp at that time. H.W. Feilden, in a correspondence to Harrison on September 21, suggested that the only way he could increase the guard force at Florence was to have the 6,000 prisoners then incarcerated at the race course in Charleston sent to Florence along with their 600 man guard force. He further indicated that the only medical officers he could send to Florence were those that were accompanying prisoners from Andersonville, and Harrison was directed to keep those personnel in Florence when they arrived (OR II, VII 1899: 855).

The guard force at Florence gradually was increased, with Captain Holman's reserve cavalry company ordered to the prison on September 23, and 500 members of the state reserves ordered to Florence from Hamburg, South Carolina soon after (OR II, VII 1902:867, 900).

A report on the Florence Stockade submitted to Lieutenant-General Hardee by Lieutenant-Colonel W.D. Pickett on October 12, 1864, provides insights into the status of the prison at that time. He reported that the stockade was approximately a week from completion at that point, but housed 12,362 prisoners. That number included 860 men who were sick in the hospital and 20 men who had been paroled. The number did not include 807 men who had taken an oath to the Confederacy and enlisted in the Confederate Army (see the discussion of "Galvanized Yankees" below). The guard force was described as:

The garrison of this post consists of five battalions of 'reserve troops' (about 1,200 effective men), the Fifth Georgia Regiment, detachments of artillery companies stationed around Charleston, and one small company of cavalry; in all about 1,600 effective men. There is also one battery of light artillery. The artillery detachments have been ordered back to their commands. I think the Fifth Georgia Regiment should remain a short time until the 'reserve forces' can be somewhat instructed in guard duty: they are yet badly instructed.

Pickett noted that the state of health of the prisoners was generally poor and said "the majority of them look emaciated and sickly and are full of vermin, and filthy in the extreme." He indicated that "three-fourths" lacked blankets and were "almost without clothing." The primary diseases observed in the prison were scurvy and diarrhea, and the death rate was 20 to 50 per day. There was one medical officer tending to the sick prisoners at that time, where 10 were needed. There was also a shortage of cooking utensils within the prison, and Pickett instructed Colonel Harrison to build shelters for the prisoners, but indicated that "200 axes and about 50 froes (used to split shingles)" would

be needed for the prisoners to do the work. Pickett also noted that there were insufficient wagons to haul firewood and supplies (OR II, VII 1902:972-974).

The monthly report filed on Florence by Captain John C. Rutherford, Assistant Adjutant-General, on November 5, 1864 reflected the status of the stockade at that time. He indicated that Colonel Harrison was still in command and reported directly to Lieutenant-General Hardee. General Gardner had been placed in command of all military prisons in Virginia, North Carolina, and South Carolina, but the status of Gardner's authority over Florence was unclear. A total of 11,424 prisoners were being held at Florence on November 5, and of those 90 had been paroled and 599 were in the hospital. The paroled prisoners were limited to within a half mile of the camp, excepting those working at trades such as blacksmiths who worked in the town of Florence. The shelters commanded by Pickett had not been built, and instead the prisoners were housed in shelters of their own making. The prisoners were observed to be in poor health, which Rutherford attributed to "prison life." He echoed Pickett's earlier observation that the prisoners had few blankets, and recommended that material be provided to allow prisoners to construct more effective shelters. The fortifications surrounding the prison were described mainly as rifle pits that could only protect the prison from an infantry attack, which were situated on two sides of the camp. The guard force at the prisons consisted of an aggregate of 1,832 men, with an effective guard force of 1,528. The guard units present at the camp at that time included the 5th Georgia Infantry, and five reserve battalions under majors Gill, Williams, Brown, Ward, and Merriwether. The daily guard was described as "6 commissioned and 17 noncommissioned officers and 336 privates (OR II, VII 1902:1097-1100)."

The stockade appears to have been largely finished by November 5, but there still were no artillery pieces mounted on the platforms at each end of the prison. There were 600 slaves working at the prison, but Rutherford indicated that number was going to be soon reduced to 100. Lieutenant-Colonel J. F. Iverson of the 5th Georgia was described by Rutherford as "commandant of prisons," although Harrison was in overall command at Florence. Iverson's duties involved posting and training guards, and he was assisted by "Lieutenant Cheatham, as adjutant, Lieutenants Barrett and Harp, as inspectors, whose duty is to see prison regulations enforced and superintend the counting of prisoners; Lieutenant Rees is charged with the burial of the dead." Rutherford further indicated that the prisoners had been organized into "detachments of 1,000 and companies of 100" as recommended earlier by Captain Rabb. A sergeant was assigned from among the prisoners to take roll each day, and also distributed rations provided by the camp commissary. A sutler was assigned to the camp who was to offer goods (mainly food) at regulated prices (OR II, VII 1902:1097-1100).

The 5th Georgia left Florence Stockade on November 18th, leaving 1st Sgt. John L. Hoster (n.d.:118) of the 148th New York to post in his diary "I suppose we have been turned over to conscripts." Lieutenant Barrett and others of the core command of the prison stayed behind at Florence. Brigadier-General John H. Winder was placed in command of prisoners and prisons on November 29, 1864, and Iverson was placed in command at Florence on December 6, 1864 (OR II, VII 1902:1100, 1197).

Most of the prison records from Florence were lost or destroyed after the post was abandoned, but a few reports have survived. The morning reports from the prison for the period from November 27 to December 5, 1864, provide insights into the prisoners held there on those dates. The largest number of prisoners reported during that period was 10,735 on December 4, and the least was 8,976 on November 27. A total of 1,103 new prisoners were received on November 28, with none received the day before. The number of prisoners in the hospital fluctuated widely during the reporting period. A high of 798 prisoners were released from the hospital and presumably returned to the general population of the stockade on December 4, with a high of 276 admitted to the hospital on December 4. Few deaths were reported from the stockade from November 27 to December 5, with a total of only nine reported during that span. Twenty-six took the oath of allegiance to the Confederacy during that period, while 1,896 were paroled. A single prisoner was reported as missing on December 2 (Florence Military Records 1864-1865).

The ration records from the same reporting period have survived. Those records are summarized in Table 1.

Table 1. Ration Records from November 27 to December 5, 1864.

Date	# in Prison	# in Hospital	Paroled	Extra Rations	Total Rations
November 27	8,904	1,134	173	553	10,894
November 28	9,584	730	83	500	10,897
November 29	9,123	312	41	100	9,576
November 30	10,094	343	47	555	10,999
December 1	10,064	391	52	555	10,962
December 2	10,040	388	54	607	11,089
December 3	9,934	471	63	613	11,081
December 4	10,475	776	73	613	11,937
December 5	10,584	768	77	617	12,046

The morning reports and ration records indicate that at least during late November to early December that the number of prisoners at the prison fluctuated with new arrivals coming in and prisoners being paroled out. The organization of the prisoners within the prison will be discussed later in this chapter, but it is sufficient to point out that the ration records indicate that a number of prisoners received extra rations for tasks performed inside and outside of the prison at any given point in time.

Brigadier-General Winder filed a report on Salisbury and Florence prisons with General S. Cooper, Adjutant and Inspector General in Richmond on December 13, 1864, that concluded that both Salisbury and Florence were unfit sites for prisons. He stated that a fourth and perhaps as much as a third of the stockade was “an impracticable morass, and cannot, without more labor and expense than building a new stockade, be in any manner reclaimed.” Further, Winder questioned the security of Florence from raids, and indicated that the area was particularly vulnerable to attacks from the coastal areas controlled by the Union. He proposed purchasing a 900-acre property near Columbia, South Carolina, that could be used to build prisons to replace Salisbury and Florence. He suggested that the Salisbury property could be sold to cover the cost of the land purchase, and that workshops could be erected to be manned by prison labor. As a part of his argument he stated “The

ratio of mortality at Florence and Salisbury exceeds, I think, that of Andersonville.” A notation at the end of the report indicated that Winder’s report was answered on December 19, but that correspondence apparently did not survive. Needless to say, Winder’s recommendations were not adopted (OR II, VII 1902:1219-1221).

By late December, 1864, concern of the Confederate officials shifted to the advancing Union forces under the command of Major General William T. Sherman. As early as December 23, 1864, Winder sent a communication to General Cooper recommending that the prisoners from Salisbury, Columbia, and Florence be sent back to Andersonville as it was no longer threatened by Union troops. There was a single road open through Branchville to Augusta at that time, and Winder considered the removal of the prisoners to be a matter of great urgency. Winder wrote to General Beauregard the next day, and pointed out that he needed guards to be able to move the prisoners, and that the South Carolina reserve forces could not be used to escort the prisoners to Georgia. A second correspondence sent to General Beauregard on December 24 by General Winder elaborated on the problem. Winder was concerned that there was going to be a problem feeding the prisoners given the compromised supply and communication lines. It was clear from Winder’s correspondence that there was no safe place at that point to send the prisoners. A series of communications was sent concerning the removal of prisoners, and by December 31st, Winder observed:

To me it appears, and it so appears to General Beauregard, that there is no place that can be considered safe from the operations of the enemy. This being the case, the question arises whether it would be better to parole at least the officers and such enlisted men whose term of service has expired.

The flurry of correspondence concerning the need to remove the prisoners from Florence continued in January and into February, 1865. Winder continued to express his opinion that there was no place safe to send the prisoners and he had an insufficient guard force to transport them. General Beauregard wanted to send the prisoners to southwest Georgia, but that proved impractical as events overran the situation. Brigadier-General Winder died at Florence on February 6, and was replaced by Colonel Forno of the Confederate States Provisional Army. The Assistant Secretary of War, J. A. Campbell, finally ordered the removal of the prisoners to North Carolina on February 13, 1865, and the prisoners who were able to travel, still under the command of Lieutenant-Colonel J. F. Iverson, were transported to Goldsborough, North Carolina via the North Carolina Railroad on February 15, 1865. There were 7,187 prisoners at Florence when the evacuation began. Approximately 700 prisoners were left at Florence and were too sick to travel. Another 700 were ill at the time they reached Goldsborough, but were sent on to be exchanged. The prisoners were paroled at Goldsborough and sent on to the Union lines at Wilmington. 1st Sergeant Hoster of the 148th New York Infantry ended his prison ordeal at Wilmington on February 18, 1865. (OR II, VII 1902:1262, 1270-1271, 1286, 1302-1304, 1219-1221; (OR II, VIII 1899:13, 96, 127, 181, 191, 210-213, 218, 224, 225, 234, 238-239, 244, 449-454).

General W.T. Sherman contemplated a plan that would include moving to Florence to free the prisoners incarcerated there. That plan, described in a corresponded dated January 19,

1865, and sent to Major General J. G. Foster, who commanded the Department of the South, never materialized (OR I, XLVII, Part I 1895:96-97).

The most serious attempt to reach Florence by Union forces did not take place until early March. The purpose of that raid was to destroy the critical rail facilities at Florence, and consisted of a force of 546 men that included the 7th and 9th Illinois, the 29th Missouri Mounted Infantry, and part of the 15th Army Corps foragers. The raid was commanded by Colonel Reuben Williams of the 12th Indiana Infantry. The expedition left from a point seven miles from Cheraw, and proceeded through Darlington before encountering serious opposition. They were turned back by a numerically superior force before they reached Florence. The facilities and supplies destroyed and the men captured were described by Williams in an after action report (OR I, XLVII, Part I 1895:254-256).

500 yards of trestle work, 2 depots, 11 freight and 4 passenger cars, 4,000 pounds of bacon, 80 bushels of wheat, 30 sacks corn, 250 bales of cotton, 1 printing office, 1 caisson and battery wagon, 30 stand of small arms, and the capture of 31 prisoners.

The Union casualties amounted to “7 wounded and 8 missing, with a report of a lieutenant and enlisted man captured “on our return.”

Physical Description of the Stockade

The Florence Stockade was hastily constructed about a mile and a half from Florence by a workforce of 1,000 slaves gathered from surrounding plantations. The stockade encompassed approximately 23 ½ acres, with palisades that were 1,400 feet long by 725 feet wide. The palisade was made of heavy, undressed timbers that extended three to four feet into the ground and projected approximately 12 feet above ground. A ditch was dug five feet deep and seven feet wide, with the excavated dirt thrown against the palisade to form a walkway for guards that extended within three feet of the top of the palisades. A “deadline” was placed 10 to 12 feet inside the palisade, and the guards were instructed to kill any prisoner who crossed the deadline. The Palisade included a stream, Pye Branch, that ran through the prison to provide water for prisoners on the upstream (north) side and to drain sinks or privies placed on the downstream (south) side. Approximately six acres of the camp around Pye Branch was swamp, and Pye Branch separated the main living area of the camp to the east, from the hospital and other facilities to the west. There were 50 guard posts established around the stockade, with 29 picket posts that were manned only at night placed approximately 20 yards outside the stockade to guard against tunneling. Platforms were erected in each corner of the stockade for artillery that could rake the camp in case of an uprising or attempted mass escape (OR II, VII 1902:1097-1099; Snell 1996:62).

Robert Knox Sneden made sketches of and around the Florence Stockade when he was incarcerated there as a Union prisoner. His sketches were later rendered as watercolors, and a selection was been printed in a recent publication (Bryan et al. 2001:-236). Review of the published watercolors indicates that there are serious errors in his depiction of the Florence Stockade, and his other drawings should be viewed with skepticism as well. He placed the road from the main entrance on the west side as heading south, when indeed it

went north. The structures to the west of the stockade were not ordered in any fashion like those described by Lemmon (1870). Sneden depicts two gates on the west end, while all other sources indicate there was only one. He shows the entire area around the prison as cleared, while there is every reason to believe that the swamps around Pye Branch retained some trees. The terrain to the south of the stockade is shown as hilly, while indeed that area was primarily within a low swamp. He presented a watercolor of what is supposed to be the main gate to the prison that is on the correct corner, but varies in detail from the same gate shown on the overall view of the stockade. His watercolor of Gen. Winder's quarters cannot be corroborated, and must be viewed as suspect given the problems with the other images. Sneden's images are not reproduced in this report.

What is probably the more accurate map of the stockade was drawn by Sergeant-Major Robert H. Kellogg of the 16th Connecticut Infantry. That image (Figure 4) shows the perimeter of the stockade and its interior layout.

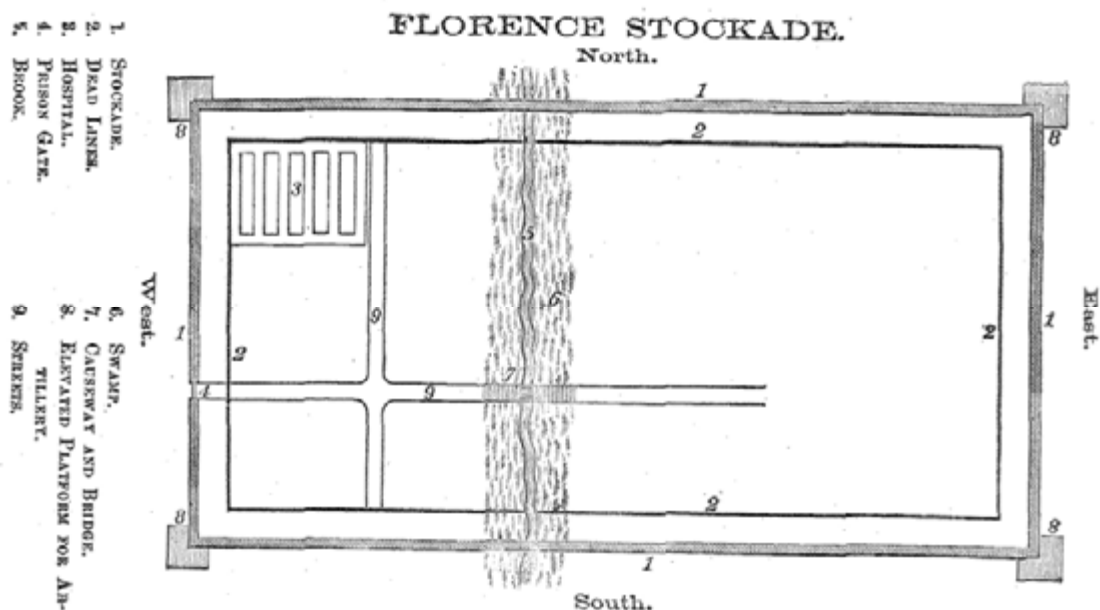


Figure 4. Map of the Florence Stockade (Kellogg 1868:318).

The camp hospital was located in the northwest corner of the camp and consisted of five sheds used to house patients at the time of Kellogg's (1868:318) map. Andrews (2004: 94), during a visit to the stockade on October 19, 1865, noted that the hospital complex included seven log buildings that each measured 40 by 20 feet. He indicated that the buildings had been partially burned when the stockade was abandoned. Two intersecting streets were present in the section west of Pye Branch, and one of the streets extended across a causeway over Pye Branch and into the eastern part of the camp that housed the prisoners (Kellogg 1868:318). Kellogg remarked on the similarity of the layout at Florence to that at Andersonville, an observation shared by other prisoners who left journals. No shelter was provided for the prisoners save the hospital, and they were left to fend on their

own with whatever they could find (Kellogg 1868:317-319; Goss 2001:217; Snell 1996:62; Miller 1900:21).

What appears to be a reasonably accurate depiction of the interior of the prison was a drawing commissioned by Ezra Ripple to illustrate his memoirs. That image was captioned “Counting off the camp,” and shows prisoners grouped west of Pye Branch and crossing the “causeway” to be counted (Figure 5). That drawing shows that the Pye Branch swamp north of the stockade was still largely forested, and illustrates rails in the lower right of the image that were probably served as part of the “sinks” or privies inside the camp.



Figure 5. Counting off the Camp (Snell 1996:84).

A second image from Ripple depicts the interior of one of the hospital buildings. The first hospital was located outside the stockade walls, but was later moved inside. This image shows that the building had a dirt floor, which was true in the case of both hospitals, but also had pine boughs for a ceiling (Figure 6). That image may depict the first hospital, as Kellogg (1868:326) clearly stated that the hospital buildings inside the stockade had shake roofs weighted down by heavy poles.



Figure 6. Col. Iverson and Garvey in the Hospital (Snell 1996:120).

Major John Mead Gould, who was stationed in South Carolina with the Union occupation forces in 1865, visited Florence and wrote a brief description of the hospitals (1865:895):

Near the entrance were the hospitals. Someone has burnt them but you can see from the ruins that they were long sheds of small logs and split boards. I judge that they were not any worse and perhaps better than the quarters of the guard outside the pen.

Lemmon (1870), as cited in Grunden and Holland (2005:15), provided details on the buildings associated with, but outside of the prison. He mentioned three guard houses and a commissary building immediately outside the gates. The commissary building was described as being a large building situated in front of the entrance to the prison. There was a wooden railroad track into the prison on which hand carts were pushed with the rations for the prisoners. A row of cabins extended north from the commissary, and housed the guards “in charge of the commissary.” That row of buildings was followed by the “office and headquarters of Colonel Iverson, commanding the post and prison of Florence.” The secretaries attached to Colonel Iverson and Lieutenant Cheatham, his adjutant, lived at the headquarters building with Colonel Iverson. The last building in the row to the north was the residence of the camp surgeon. South of the commissary building were huts occupied by about 30 drummer boys who had been separated from the general prison population. The grounds of the prison also contained “shops for artisans, clerks, and officer’s quarters, and a large hut occupied by Naval officers...who had been captured at sea.” The masters of the track dogs used to run down escaped prisoners lived in a “nice wall tent south of the Colonel’s house.”

The camp fortifications that were built to protect the camp from attack were described as being on “two sides of the stockade.” (OR II, VII 1902:1097-1100). That places the fortifications on the east and west ends. Earthworks are still visible near the east end of the stockade. Those earthworks are slightly north of the northeast corner, and probably represent defensive trenches or extensive rifle pits. What appears to be earthworks are present in the same relative position on the west side of the camp, and parallel an existing dirt road. That road may have been the original road between the Stockade and the cemetery to the north. Lemmon (1870), as cited in Grunden and Holland (2005:15-16) indicated that a 12 pounder cannon charged with grape shot was situated just outside the west gate and aimed toward the gate. He also noted that there was a redoubt “on the corner toward Florence,” as well as “numerous redoubts and casemates at other exposed places.” He further indicated that rifle pits “encircled all sides,” but was only 10 rods from the prison to the south.

Guard camps were apparently located on both sides of Pye Branch. Very little historical information has been found on the guard camps, and much less is known about the guards than the prisoners. According to Kellogg (1868:237) the slaves who built the stockade and outer defenses lived in a camp that was “a few rods the north side of the stockade.” It is likely that the guard camps were also located north of the stockade, given the fact that Pye Branch was probably heavily polluted by the time it flows through the stockade to the south.

A description of the fortifications and guard camps was provided by Sidney Andrews (2004:93), who toured the South after the Civil War and wrote articles for the *Chicago Tribune* and *Boston Advertiser*. He visited Florence on October 19, 1865 and observed:

On the east and on the west, outside the stockade, twenty rods or so distant from the walls, are the long lines of earthworks reaching away to the timber on either side, and far down in front of these again are the numerous rifle-pits commanding the advance for nearly a hundred rods. The main entrance to the stockade was at the northwestern corner. Near this corner were the log-houses of the guard. The barracks stand almost as they did when last occupied. Just north of this entrance is a handsome grove of a dozen trees, among which yet remain the benches and stools of the officer of the guard. Fifty feet in front of the middle of the western wall was the flag-staff whence floated the banner of treason and slavery. Its stump only remains, and loyal and disloyal alike cut chips of memento therefrom. Across the pestilential quagmire, beyond the northeastern corner, is another deserted village of log-houses,--houses of the guard for the rear of the prison-pen, not one of which has been touched. In the southeastern corner of the pen was the rear entrance—thence the prisoners went to fetch wood, a dozen cords of which yet lie piled only five or six rods away.

Lemmon (1870), cited in Grunden and Holland (2005:16) described the guard camps as:

Besides the Fifth Georgia camped around the redoubt, Maj. Brown's battalion of South Carolina reserves camped outside the bastion of the

breastworks on the northeast; there was a camp of Georgia reserves commanded by Maj. Williams similarly disposed as the latter, on the southeast; a company of cavalry encamped on the railroad a mile west of the prison; and the camp of slaves quartered for security within the breastworks—and near the Fifth Georgia. There was also a fortified camp beyond the Fifth Georgia, at the north, a bivouac or recruits from the prison called ‘Galvanized Yanks,’ comprising at most 600 men. They were commanded by Lieutenant Barrett and styled the ‘Sixth Regular Confederate States Infantry.’”

Lemmon’s account was in error on some specifics. As an example, the reserves commanded by Maj. Williams were South Carolina reserves, and neither of the Galvanized Yankee units raised at Florence was actually commanded by Barrett. Barrett was a Captain in the Eighth Confederate States Infantry. Lemmon’s description also leaves out most of the reserve units known to have been present at Florence.

Ezra Ripple (Snell 1996) included several drawings in his memoirs that included views of building inhabited by guards. Each depicted log cabins with wooden board or slab roofs, a similar construction to that described by Kellogg (1868:326) for the hospital. Figure 7 illustrates a representative view from Ripple that includes guard cabins.



Figure 7. Dressing wounds (Snell 1996:134).

Cemeteries were established north of the stockade for burial of the Union dead. William M. Mitchell was a Union prisoner placed in charge of caring for the dead from the stockade. Mitchell testified before a Congressional Committee after the War that investigated the treatment of prisoners of war. Mitchell testified that he collected the dead at a gate near the hospital. He recorded the name and unit of the deceased and placed their bodies into a wagon for transport to the cemetery. Trenches approximately 3 feet deep were dug and the bodies were placed side by side in the trenches. The trenches were then recovered and each body was marked with a headboard. Mitchell testified that the headboards were marked with the names of the deceased, but a subsequent account indicates that the head boards were marked with number that presumably matched numbers and names in a burial record kept by Mitchell. Mitchell indicated that the Union dead were placed in five cemeteries at Florence. The main cemetery was located on the left of the road leading from Florence to Georgetown, South Carolina.” That cemetery is now incorporated into the Florence National Cemetery. The second cemetery contained about 400 bodies and was the initial cemetery used when the stockade was occupied. That cemetery is described as being located on the “right side of the road.” The third cemetery was near the second and also on the right side of the road. That cemetery contained the graves of “Galvanized Yankees” for the group raised for the 2nd Foreign Battalion. Additional graves were placed near the “small pox hospital” which was apparently outside the hospital, and 10 more were placed “in the edge of the woods, near the main burial ground.” The death register prepared by Mitchell was not found; a copy he made in the closing days of the war was lost after he collapsed while in transit north (Congressional Record 1869:982-985; Rusling 1866).

The stockade was also supported by a number of facilities. It is known there was a sutler present, and there was an early hospital placed outside the stockade. There are some references to a headquarters that was probably located to the west of the stockade. Storage facilities for rations were probably also present. No map or images of the total stockade complex has survived.

Life at Florence for Union Prisoners

Numerous diaries and letters have survived that chronicle the life and death of Union prisoners at the Florence Stockade (cf Fosdick 1887; Snell 1996; Goss 2001; Kellogg 1868; McElroy 2003; Hoster n.d.; Miller 1900; Elliott 2002; Newton 1896; Stewart 1999; Moore 1972; Cook 1996).

Most of the prisoner accounts reviewed during the current research contained repetitive and even derivative information. The most informative and authoritative accounts were those by Ripple (Snell 1996), Goss (2001), Kellogg (1868), and Hoster (n.d.), and much of the information needed to construct the lives of Union prisoners at Florence was taken from those four accounts. Hoster provided the richest detail on daily life at the prison that was delivered in a detached style, and was unfiltered by post-War publication of his journal. Congressional testimony taken after the close of the war also proved to be helpful. Testimony by both Warren Lee Goss and William M. Mitchell before a committee charged with investigating the treatment of Union prisoners in southern prisons provided needed details not found elsewhere, although Mitchell’s recall of the some of the specifics at Florence was at times flawed

(Congressional Record 1869 978-985). Public records, including monthly reports and morning reports from Florence were used sparingly in this section.

Organization

The Confederate guard force at the Florence Stockade was insufficient to make sure that the rations were distributed, order was maintained inside the stockade, wood was cut and brought into the stockade for prisoner use, daily roll calls were held, and many other tasks required to make the stockade function on a day-to-day basis. Prisoners were recruited to carry out many of those tasks, and were rewarded with extra rations. As delineated in Table 1, above, from 500 to 617 extra rations were provided from November 27 to December 5, with the exception of November 29, when only 100 extra rations were noted. The figure of 500 to 600 prisoners receiving extra rations for duties performed probably reflects the size of the prisoner workforce needed on a daily basis to make to prison function.

Members of the prison police force first received extra rations every fourth day and then extra rations every other day for carrying out their duties. Sergeant John Hoster (n.d.), of the 148th New York Infantry, joined the prisoner police force, called the “Police Club” while he was still incarcerated at Charleston. His initial duty in Charleston was to guard a street within the camp and to keep prisoners from crossing the dead line. His extra ration for that duty was drawn directly from the Police Club. His duties at Florence included guarding the causeway between the east and west sections of the camp, guarding the main road in the camp and maintaining order, arresting those (presumably among the prisoners) who were selling items above the regulated price, standing guard at the hospital, standing guard at the gate, standing guard at the swamp, and putting down disturbances. There were 200 members of the Police Club at Florence who were initially divided into four squads of 50 men each. The men were on duty every fourth day, and drew extra rations while on duty. The Police Club was reorganized on October 15th, with the men divided into two companies of 100 men each with duty and extra rations every other day. Hoster remarked in his journal on October 13 “I have plenty to eat since I joined the Police Club.” The extra rations received by the members of the Police Squad appear to have been of better quality than those issued to the rest of the prisoners. Hoster had beef to eat for ten days while he was a member of the Police Club, while the camp as a whole received only two beef rations through the history of the camp. He mentions that on October 15 that he, in the company of 12 policemen, left the camp to secure beef “for the sick of the camp.” The police split up the leftover beef and none was shared with the other prisoners. Hoster quit the Police Club on the morning of November 28 without an explanation recorded in his otherwise detailed journal.

Goss (2001: 221-222) stated that the Police Club was run by “Big Peter”, who served as the chief of police. Their duties included:

*...seeing to the police duties of the camp, guarding against the
perpetration of nuisances, constructing shelter, procuring fuel for those
not able to help themselves, and the carrying out of the dead.*

It was Goss’ opinion that the Police Club accomplished a number of good things within the stockade, but that it became an extension of the Confederate guards and misused its

authority. He was particularly critical of “Big Peter”, the chief of police, who he characterized as “a gigantic, ignorant brute, with neither the good sense, good humor, nor the disposition to deal justly.”

Private Samuel Elliott (nd) was more direct than Goss in his criticism of the Police Club. He accused the members of the Police Club of appropriating a shipment of clothing from the Sanitary Commission for their own use and of mistreating prisoners. At least part of his accusation was supported by Hoster (n.d.:118), when he indicated that the police split up a shipment of clothing on November 18 from 8-10 boxes of clothing that had been received the day before. There is little doubt that there were abuses of power by the Police Club, but on balance (as Goss indicates) they probably served an important function within the camp.

The remainder of the prison workforce probably carried out jobs that presented fewer opportunities for corruption and abuse of power than the Police Club. Goss (2001:248-267) served as a clerk and worked in an office in Colonel Iverson’s headquarters. Goss received extra rations, clothing, and was allowed to sleep in one of the log headquarters buildings. He made a register of the dead, distributed mail, and dealt with some correspondence.

Kellogg (1868:340) worked in the prison hospital and received extra rations for his efforts. The rations of the hospital workers were reduced in the middle of November. Kellogg’s food was provided from a bakery and kitchen located outside the prison. Even with reduced rations, Kellogg received more and better food than the inmates at the prison who did not receive a supplement.

Ripple (Snell 1996:103-135) served part of his term at Florence as a camp musician. He received extra rations and clothing until he attempted to escape. He was recaptured and returned to the prison with wounds inflicted by the dogs that tracked him down. Ripple best summarized the use of Union prisoners to fill vital functions at the camp when he stated:

The keeping of prison records, the baking for the hospital, the attendance on the sick, the butchering for the camp, the wood chopping, and the burying of the dead were all done by our own men. No work of service, however, that properly belonged to the Confederate Army was performed by any of them.

The prisoners were organized into “detachments of 1,000 and companies of 100” as recommended earlier by Captain Rabb. Each thousand and each hundred was assigned to a sergeant, and rations were distributed directly to the prisoners within companies by the sergeants who were responsible for them (OR I, Volume VII 1902:1097-1100). The sergeants also received extra rations, and kept any undistributed food (Hoster n.d.:129).

Shelter

As previously mentioned, no shelter beyond the hospital was provided for prisoners inside the stockade. Kellogg (1868:319) indicated that there were trees and stumps left inside the stockade when it was built. The first prisoners in the stockade used the trees and stumps to build shelters and accumulate firewood. Hoster (n.d.:111-12, 131) and his two messmates

brought a tent with them from Andersonville via Charleston. They pitched their tent facing east by a stump in the stockade, and it provided adequate shelter until cold weather. The tent survived Florence, and Hoster took it with him when he left on February 17. Most prisoners reached Florence with no more than the clothes on their backs. Ripple (Snell 1996:66) described the “shebang” he and his messmates constructed as:

We had only two gum blankets and they were very much worn by this time, but they would do tolerably well to shed water, and would serve to break some of the force of the cold north winds, which in our exposed position we got the full benefit. There was nothing left to do but dig a hole in the ground. As it would have to be roofed over with our gum blankets, we could only dig it as long and as wide as they would permit, and in that hole four of us had to harbor for the winter. We dug it about three feet deep. But could not make it long enough to straighten our legs, or wide enough to permit us to lie in any other way than spoon fashion.

Andrews (2004:94-95) estimated that there were 2,500 to 3,000 shelters within the prison when he visited there on October 19, 1865. He stated “In the construction of these habitations there is almost infinite variety on a common, general plan.” He took shelter in a shebang that was 6 ½ feet long by 4 ¼ feet wide and 5 feet high at the center. The floor was dug 15 inches deep, and there was a forked stick at each end that supported a ridge pole. Slabs of wood that rested on the ridge pole and the ground formed the roof of the structure. A back wall was created for the house with sticks driven into the ground, while a small fireplace of bricks and the door were on the front wall. The roof apparently was first covered with pine boughs, then dirt, with the wooden slabs placed on top. The shebang protected him from a storm that raged while he was at the prison, and he stated that three-fourths of the shelters were in as good a shape as the day they abandoned. He stated that about 100 shelters were built above ground, while the rest were built in or over holes of varying sizes.

Social Networks

Social networks appear to have existed within the stockade that were based on former military units, states of origin, and other factors. Many of the prisoners at Florence arrived from Andersonville, and probably had fairly strong social ties to at least some of the prisoners who were moved with them. Most prisoners appear to have pooled their resources and shared shelter and mess with other prisoners. Hoster (n.d.) normally had from one to four tent mates who also pooled their rations. Cooking utensils were in short supply among the prisoners, and uncooked rations were given to all but those in the hospital. Hoster and his tent mates appear to have often had access to extra rations, either through working on jobs that drew extra rations or occasionally buying food from the camp sutler. Hoster was visited on at least one occasion by a soldier from his company of the 148th New York Infantry. That soldier, Parsonnar, had signed the oath and become a Galvanized Yankee, but was returned to the stockade with his and one other company for stealing provisions from civilians. Parsonnar was welcomed into Hoster’s tent for the night despite what had happened. However social networks were formed, those with a strong social networks and support from friends in camp stood a far better chance of surviving the imprisonment ordeal than those who lacked those ties.

Galvanized Yankees

Foreign-born Union prisoners were recruited to join the Confederate Army soon after the Florence Stockade was in operation. Correspondence dated September 30, 1864 from J. F. Lay, Assistant Adjutant and Inspector to Col. George P. Harrison in command at Florence directed that foreign-born prisoners at Florence who were willing “to take the oath and either enlist or take employment” should be placed in a separate camp from the other prisoners” (OR II, VII 1902:900). A telegram to General W. J. Hardee from S. Cooper, the Confederate Adjutant and Inspector General indicated that Hardee’s request to enlist prisoners had been approved to the Secretary of War, who instructed that the prisoners “be detailed for work at their respective trades” (OR II, VII 1902:1014). The recruitment had begun prior to receipt of the approval, however, as Col. W. D. Pickett (OR II VII 1902:974) indicated in a report to Gen. Hardee dated October 12, 1865, that 807 men had already taken the oath of allegiance to the Confederacy, and had enlisted in the Confederate army. He went on to state:

I to-day inspected the recruits to our service from the Yankee prisoners. They are mostly foreigners, and are generally good-looking men, and I doubt not would make good soldiers. They are woefully destitute in clothing and blankets, and their wants should at once be supplied. I recommend that they at once be placed in the field, either as an organization or scattered in old commands. I understand several hundred more foreigners can be enlisted, and if you take Western men, 1,500 to 2,000 more can be enlisted. About fifty of those already enlisted are old gunners and seamen, and are anxious to go in the Navy. I recommend that they be allowed to do so. I enclose a list of mechanics among the ‘recruits’.

The recruitment of “Galvanized Yankees” from among the prisoners was criticized by at least one Confederate guard and many Union prisoners. Second Lieutenant Thomas J. Eccles, of Company D. of Gill’s Battalion, CSA, wrote a series of articles for The Yorkville Enquirer under the name “E”, and reported on October 7, 1864, said “Some 500 of them are about to take the oath, which they should not be allowed to do.” He further stated in an article dated October 18, 1864 that “The Yankees continue to take the oath, and many of them are enlisting—a large number are accumulating here, but it is probable they will be sent to such places as they may be made useful (Eccles 1864-1865).”

Goss (2001:225) indicated that Galvanized Yankees were held in great contempt by the other prisoners, to the point that they had to be protected by the Confederate guards from the other prisoners. He also indicated that the name “Galvanized Yankee” was given the recruits by the Confederates to distinguish them from “genuine” Confederate soldiers.

Union prisoner Ezra Hoyt Ripple (Snell 1996:71) minimized the impact of the enlistments by saying that native-born Union soldiers turned down the call to enlist in the Confederate Army and that the Confederates then turned to foreign-born soldiers with a little more success. He indicated that those who enlisted were returned to the Stockade when the experiment failed.

Kellogg (1868:319-320) presented a more pragmatic view of the situation when he said:

We found with surprise and sorrow that many of our men had really taken the oath of allegiance to the Confederacy, and had gone into the Southern army, and that still more had the intention of doing it. Over at our left was a camp which we were told was occupied by those prisoners who had taken the oath. It was not hard to account for it. They were ragged, half starved, and death was staring them in the face.

By entering the Southern army they, no doubt, expected to receive better food, and it was their hope and intention, also, to escape at the first opportunity. We all shuddered at the prospect of staying through the winter in the Confederacy, if, indeed, we should live so long.

There is little doubt that those who enlisted were drawn by the lure of food, shelter, and clothing. Many of the prisoners at Florence came from Andersonville, and had no allusions about what was ahead for them at Florence.

Two battalions were apparently raised from among the prisoners at Florence. The first was raised soon after the prisoners were first shipped to Florence, and was referred to as Brooks' Battalion. An undated, and apparently incomplete, roster with 788 names of enlisted men was found for Brooks' Battalion during the current research on a National Park Service (NPS) website (http://www.itd.nps.gov/cwss/Soldier_Results.cfm). Correlation of that list with an undated list of 132 Federal Prisoners at Florence Stockade found at the South Carolina Department of Archives and History (Florence Military Records 1864-1865) indicates that 40 of the 132 names were listed on the Brooks' Battalion roster. The correlation between the undated list and the roster of Brooks' Battalion was strong enough to assume that all 132 individuals on the undated list were probably Galvanized Yankees as well.

Analysis conducted during the current research of the undated list of 132 prisoners from Florence indicates that only eleven of the 132 (8%) were born in the United States. The foreign-born soldiers were from Canada, England, Ireland, Scotland, Prussia, and France. Of the native-born troops, all were from border states or areas with significant numbers of southern sympathizers such as Virginia, Maryland, Tennessee, and Kentucky. The single exception was from Indiana.

Brooks Battalion was commanded by Major J. Hampden Brooks. He took his battalion to Summerville, South Carolina, and then moved four of its five companies into the fortifications at Savannah. The Battalion was disbanded and the men returned to Florence Stockade under orders from Gen. Hardee on December 18, 1864 (anon n.d.).

Trouble with the Galvanized Yankees began well before they were moved to Savannah. Hoster (n.d:118) remarked in his diary on the return of 200 to 300 Galvanized Yankees to the Florence Stockade from Brooks Battalion as early as November 17. One of the returned

Galvanized Yankees was a private from Hoster's company in the 148th New York, and his story was told in Hoster's diary as:

Parsonnar called this evening and is going to stay with us tonight. He was stationed at a place called Somerville (Summerville). He says the rations were about the same as here but by foraging they got all the chickens, fresh pork, and sweet potatoes they wanted. Citizens and negroes had to stand guard over their henroosts to keep the galvanized Yanks from stealing the chickens. He thinks his squad was sent back for stealing. He belonged to Brooks Battalion 1st S.C. regulars.

The troops from the disbanded Brooks Battalion returned to the Florence Stockade on December 23, 1864. Hoster reported their return as:

A lot of galvanized Yanks came in from Savannah today. Sherman took Savannah on the run. They had laid in a plot to spike the guns and kill the officers in charge of them and make it to our lines. They were betrayed, however, by one of their own men and in the night while they were asleep and their arms in the stack they were surrounded by a regiment of genuine rebs and seven orderly sergts were taken out and shot without ceremony and the men kept under guard and sent here. Their blankets were all taken from them when they were turned into the stockade.

Hoster's account was corroborated by Brooks (1910) from a history of the Brooks Battalion by Vincent F. Martin. The Martin history could not be located during the current research. Brooks added that the plot to kill the Confederate officers was betrayed by an orderly sergeant named "Sinner", although that name does not appear on the Brooks roster.

A second battalion of Galvanized Yankees was being formed at the Florence Stockade even as it was becoming clear that Brooks Battalion was going to be a failed experiment. That Battalion, the 8th Battalion Confederate Infantry, which is also referred to as the 2nd Foreign Battalion, was recruited in November and December. Caption James Barrett, formerly of the 5th Georgia and earlier in command of the interior of the prison, did at least some of the recruiting. An undated roster of this battalion available from the National Park Service (n.d.) indicates that the battalion, at least one point in time, consisted of 709 officers and enlisted men.

Correlation of the rosters from Brooks' Battalion and the 8th Battalion showed very little overlap. Most of the names found on both lists were common names that could have belonged to different individuals. Two sergeants from the Brooks Battalion are represented on both the 8th Battalion roster and the undated list of 132 prisoners from Florence. One, Samuel Clifford, was incarcerated at Florence as a "Citizen", and the other, William Booth, was from the 149th Pennsylvania Infantry. Care seems to have been taken to keep prisoners who had been in the Brooks Battalion out of the 8th Battalion.

The attempt to utilize Union prisoners in the Confederate army appears to have been limited to the Florence Stockade, and was probably driven by the severe shortage of manpower available to the Confederates late in the war. Confederate prisoners of war who changed sides were also referred to as Galvanized Yankees, and were used as soldiers by the Union on the western frontier with success during the War. Those individuals were removed from the main theater of the war and were guaranteed that they would not have to fight against Southern troops (Brown 1986). The experiment at Florence Stockade failed, despite the fact that the majority of the enlistees were foreign born and should have had but weak loyalty to the Union. The experiment was attempted at a time when it was clear to almost everyone that the end of the war was near, and that the war would end in defeat for the south.

Diet

Food, or the lack of it, was a recurring theme in the prisoner accounts. As discussed above in this chapter, Confederate officials expressed concern over their ability to supply adequate rations to the prisoners even before the stockade was constructed. Supply became more difficult as time passed and supply lines were cut by the advancing Union troops.

Eccles (1864-1865) in an article written at Florence and dated November 9, 1864, stated what in many quarters would become the standard reply when the Confederate government was accused of not providing proper rations for the prisoners when he said:

They are well fed, drawing the same rations we do, but they crave vegetables, which except potatoes are not to be had by any of us.

He went on to say that there was an active market inside the prison in “bacon, tobacco, potatoes, red peppers, and pea-soup.” Some of the foodstuffs sold in the prison were provided by a sutler who was assigned to the camp, and some came from trade with guards for “rings, pipes, ink stands, watches, oil-clothes, and a certain style of Yankee hat.” Food to supplement prisoner’s diets was available for those who had money or something to trade, but the majority of prisoners subsisted almost entirely on rations provided by their captors.

A report on the Florence Stockade prepared by Captain John C. Rutherford on November 3, 1864, admitted that the prisoners had received “little meat” and that their rations consisted of “sorghum sirup (sic) and meal.” (OR II VII 1902:1097-1100) Syrup had been recognized prior to the establishment of the stockade as key constituent of the prisoner’s rations. Major H. C. Guerin had recommended that the syrup ration be restricted to one gill (1/4 pint or 1/2 cup) per prisoner per day in response to a general shortage of syrup in the area. Even that amount could not be maintained as time passed and supply lines broke down (OR II VII 1902:838).

It is impossible to reconstruct the quantity of food issued to the individual prisoners at Florence Stockade. Hoster (n.d.:113, 128, 129) recorded that he received 1 quart of beans, 3/4 pint of molasses, 2 “sanitary cups” of meal, 1 “sanitary cup” of hominy, and a tablespoon of salt as extra rations from the Police Club on October 15, 1864. He drew 1 1/2 pints of meal plus an unspecified amount of molasses as regular rations on January 18, 1865 and 1 1/2 pint of meal and a gill of beans on January 25, 1865. It is most likely that the amount of any one

foodstuff varied with the strength of supply, and that mixed rations, or varying amounts of different items, were likely given to the prisoners at any give time.

The best way to view the diet of the prisoners in the stockade is through the foods consumed by Hoster during his tenure at the stockade. Hoster recorded what he ate and how it was prepared from his arrival at the camp on October 7, 1864, until his departure on February 17, 1865. There are gaps in his journal and it is difficult to characterize the foods he ate on some days, but his journal entries provide the most unbiased view of the diet for prisoners at the stockade that is currently available from any source. It should be noted that Hoster was a member of the Police Club from his arrival at the camp until he resigned on November 28. Further, his diet and the diets of his messmates were supplemented at times from extra rations earned from hauling wood or from extra rations earned by messmates. He and his messmates attempted to buy food from the sutler and cook it for resale at one point, but found that the sutler's prices were so high that they could not earn enough to replenish their inventory and have extra food for themselves. They ended up dissolving their enterprise and eating their inventory.

With all of that said, the data on food abstracted from Hoster provides valuable insights into the diet of at least some prisoners in the stockade. Those data are summarized by date, foodstuff, and the number of meals eaten in the tables (Tables 2 through 6) that follow.

Table 2. Hoster Food, October, 1864.

Date	# Meals	Rice	Beans	Beef	Flour	Meal	Flour/Meal	Hominy	Sweet Potato	Molasses	Salt
7	2	X	X		X						
8	2	X	X			X	X				
9	2	X	X		X						X
10	2				X	X				X	
11	1				X						
12	1				X						
13	2		X		X	X		X			
14	2		X				X	X		X	
15	2		X					X			
16	3		X			X	X				
17	3		X			X					
18	1		X	X				X			
19	ND										
20	2				X		X				
21	2					X				X	
22	2		X		X						
23	1		X			X					
24	2		X			X					
25	1		X			X					
26	0										
27	2						X				
28	1		X		X	X					
29	3		X		X				X		
30	1		X	X	X	X					
31	1		X	X	X						

ND = No data. Includes some foodless days.

Table 3. Hoster Food, November, 1864.

Date	# Meals	Rice	Beans	Beef	Flour	Meal	Flour/Meal	Hominy	Sweet Potato	Molasses	Salt
1	2					X					
2	2					X					
3	3			X		X					
4	2					X					
5	2					X				X	
6	1		X			X					
7	2		X		X	X					
8	1					X		X			
9	2		X			X	X				
10	1		X						X		
11	2	X	X			X			X		
12	1								X	X	
13	2		X		X	X			X		
14	ND										
15	2	X		X				X	X		
16	2	X	X			X					
17	2	X		X	X						
18	2	X		X	X					X	
19	2	X		X	X	X					
20	2	X		X	X						
21	2			X		X	X		X		
22	1		X		X						
23	2	X			X	X					
24	2	X			X	X					
25	2	X				X					
26	1	X									
27	2	X									
28*	2	X				X					
29	1				X	X					
30	2	X			X	X					

ND = No Data. Includes some foodless days.

* = The date that Sgt. Hoster left the Police Club.

Table 4. Hoster Food, December, 1864

Date	# Meals	Rice	Beans	Beef	Flour	Meal	Flour/Meal	Hominy	Sweet Potato	Molasses	Salt
1	0										
2	2				X	X					
3	1						X				
4	ND										
5	ND										
6	ND										
7	1								X		
8	1						X		X		
9	1				X						
10	2					X			X		
11	1		X			X					
12	1	X	X								
13	1					X					
14	1					X					
15	2					X					
16	2		X			X					
17	3					X		X			X
18	2		X			X	X				
19	2		X			X					
20	2					X					
21	2		X			X					
22	2		X			X	X				
23	2					X			X		
24	2								X		
25	1				X				X		
26	1					X					X
27	2					X					
28	2		X			X		X	X		
29	2	X		X	X				X		
30	3	X		X		X	X			X	
31	3					X			X		

ND = No Data. Includes some foodless days.

Table 5. Hoster Food, January, 1865

Date	# Meals	Rice	Beans	Beef	Flour	Meal	Flour/Meal	Hominy	Sweet Potato	Molasses	Salt
1	3					X					
2	0										
3	2					X				X	
4	1		X			X					
5	2		X			X		X			
6	2		X			X					
7	2		X						X		
8	2					X				X	
9	2		X		X	X				X	
10	2				X				X		
11	2		X		X	X			X		
12	2	X	X			X		X	X		
13	2		X			X		X			
14	2					X				X	
15	2		X			X				X	
16	2				X	X					
17	2				X	X					
18	2				X	X					
19	2		X		X	X					
20	2		X			X					
21	2		X			X					
22	1		X			X					
23	2		X			X					
24	2		X			X					
25	2		X		X						
26	ND										
27	2	X	X	X							
28	2		X			X					
29	2		X			X					
30	2		X			X					
31	2		X			X				X	

ND = No Data. Includes some foodless days.

Table 6. Hoster Food, February, 1865.

Date	# Meals	Rice	Beans	Beef	Flour	Meal	Flour/Meal	Hominy	Sweet Potato	Molasses	Salt
1	2		X							X	
2	2		X			X					
3	1		X			X					
4	ND										
5	1		X	X	X						
6	ND										
7	1					X					
8	1					X					
9	1					X					
10	ND										
11	ND										
12	1				X						
13	ND										
14	ND										
15	ND										
16	ND										
17	ND										

ND = No Data. Includes some foodless days.

The Hoster food data revealed insights into the week-by-week variations of the food available to prisoners, as well as the value of having special status that Hoster's participation on the Police Club gained him. The basic rations provided to the prisoners most often consisted of beans and meal. Rice was provided at times, with the most frequent rice rations provided in November. Beef was rarely available, but Hoster drew beef rations 10 times while he was a member of the Police Club. He drew or shared in beef rations four times after he left the Police Club, but at least some of that beef appears to have been drawn by Hoster or his mess mates for extra work around the stockade. No bacon or other pork was represented in Hoster's diet during his entire tenure, and it is likely that pork was being reserved for the Confederate army units on duty elsewhere as pork is more easily preserved for later use than beef. Hoster subsisted largely on meal and beans after he left the Police Club. Sweet potatoes appeared in his diet somewhat more frequently in December than in October or November, but that probably had more to do with available supply than privilege. Molasses was rarely available in the stockade, or at least available to Hoster. Hoster's molasses rations were less frequent than his beef rations while he was in the Police Club, and remained scarce through the rest of his tenure at the stockade. Salt was also scarce, and was used by Hoster only three times according to his recorded food use.

Drinks are not reflected on the Hoster food tables presented above. It is assumed that his most frequent fluid intake was water, which was drawn from the stream that ran through

the camp. Hoster occasionally remarks on having coffee with his meals. He had milk on three days in November and once in December, but the source of the milk was unclear. He mentions having “rice coffee” and “pepper tea” in a very few instances.

Most of the meals prepared by Hoster and his mess mates were cooked without condiments. He used pepper in cooking his food at least once, and soda to prepare “soda dodgers” on very rare occasions. Those items likely came via trade with other prisoners.

All of the rations eaten by Hoster, with the exception of a rare plate of bean soup purchased from others, had to be cooked by him or his mess mates. Cooking and food service utensils were hard to acquire within the camp, and there are a number of entries on Hoster’s journals where he and his mess mates borrowed or bartered for those items. The lack of utensils and the inability to cook rations doubtless added to the misery and death rate of the inmates of the camp.

Finally, Hoster did occasionally have access to tobacco. Tobacco was never part of the rations given to prisoners, and was acquired from new arrivals, camp guards, and the camp sutler. Hoster savored those occasions when he was able to share or smoke a pipe of his own.

Hoster was far more fortunate than the majority of the prisoners in the stockade. His privileged status through at least the first 53 days of his incarceration at Florence doubtless enabled his survival of the rest of his imprisonment. He also enjoyed the shelter of the tent he brought from Andersonville and the cooking utensils he and his mess mates brought with them, borrowed, or acquired through barter. The support he received from his mess mates, although they bickered from time-to-time and moved in and out of the tent, also gave Hoster a support structure that enabled him to survive a severe illness that struck in February. Many of the prisoners lacked one or more of the things that favored Hoster’s survival, and did not survive the experience or ended the war in broken health.

Health

Many of the prisoners at Florence arrived there after being incarcerated in other prisons. Florence received many prisoners from Andersonville, who suffered from malnutrition and a number of ailments. The Florence Stockade never had enough medical specialists to adequately care for the prisoners who required hospital care. The health problems of the prisoners were compounded by inadequate rations and medicine, the shortage of cooking utensils, at times from lack of enough firewood, a poor water supply, and lack of shelter.

The first camp hospital was outside the walls, and consisted of nine sheds covered with pine boughs. The original prison hospital had its own deadline, and was organized into 11 wards. Each ward had a ward master and eight or nine nurses. The ward master and the nurses were aided by seven stewards drawn from among the prisoners in each ward (Kellogg 1868:321-322).

A map prepared by Kellogg (1868:318) showed five sheds that comprised the hospital after it was moved inside the stockade in late October. He (1868:326) described part of the hospital as:

Two of them were seventy-five feet long, and thirty-one in width, without a nail in them. The frames were made of timber, cut in the swamp near the prison, and fastened together with wooden pins. The roof was made of “shakes” or shingles held on by heavy poles for weights.

Kellogg (1868:326-327) indicated there were soon 800 patients in the hospital, with 150 in the 5th Ward where he worked. The staff was not sufficient to meet the needs of the critically-ill patients, and medicine was dispensed in many instances by stewards who were prisoners working in the hospital.

Andrews (2004:94), who visited the camp in October, 1865, well after the stockade had been abandoned, said that the hospital was comprised of seven log buildings that each measured 40 by 20 feet. Kellogg’s map of the prison was probably more accurate than Andrew’s description, as Kellogg served in the hospital as a steward for an extended period, and Andrews spent a single day there.

Medicine was apparently in short supply at the hospital, as Kellogg remarked that what was intended as a month’s supply of medicine seldom lasted more than two weeks. At least some of the medicine, particularly medicinal herbs, appears to have come from within the Confederacy, but some drugs like quinine apparently came through the blockade from England. Medicines were made from locally-available bark and herbs when the supply from outside the prison failed. One scurvy medicine was sour beer made from cornmeal, that Kellogg said worked “with very good effect” (Kellogg 1868:324-325).

The U.S. Sanitary Commission provided some clothing and food for the sick prisoners at Florence. Clothing and bedding was provided, as was “condensed coffee and milk, extract of beef, tomatoes in tin cans, &c” (Kellogg 1868:323).

The inmates who made it into the hospital were fed food prepared in a prison bakery. Ripple (Snell 1996:105) described being given “wheat-flour” loaves of bread from the bakery that were the size of large biscuits when he was first paroled to play in a camp band. He said the loaves were “made with salt rising,” and were made without yeast. One loaf was considered a day’s ration. The food for the prisoners was supplemented with fresh beef when available.

Scurvy was a major problem at the Florence Stockade, and was caused by the lack of proper nutrients in the inmate’s diets. Goss stated, during Congressional testimony about the treatment of prisoners at Florence (Congressional Record 1869:194):

At Florence, no vegetable food was ever issued, or meat, with three exceptional cases, to any but hospital inmates. Our rations had more variety than we obtained at Andersonville, usually consisting of wheat

flour, hominy, rice, or Indian meal. Dr. Hamlin, in his learned dissertation on Andersonville, assumes that the scarcity of food were entirely owing those aggravated forms of scurvy with which the prison was reeking. This, no doubt, contributed in producing them, by weakening the system and giving less power to the body to throw off the influences of disease; but in my opinion, it was the entire absence of vegetable food, together with the want of variety, which caused such unusually dreadful cases of scurvy.

Goss appeared to exaggerate the lack of vegetables to some degree, as sweet potatoes were provided from time-to-time. The relative lack of green vegetables did contribute to the massive outbreak of scurvy, however, that contributed to so many deaths at Florence.

Starvation or malnutrition was a major cause of death at Florence. Rations to the camp were suspended on November 21 and 22, 1864, because of a suspected escape tunnel (Hoster n.d., p. 118-119). That suspension of rations is mentioned in a number of prisoner accounts, as many in the stockade were surviving on the very edge of starvation. Rations were issued during the afternoon of the third day, causing Ripple to remark in his memoirs (Snell 1996:77):

A ration lost for any cause was lost forever in Florence. Those three days sent many a poor fellow to his grave, and of all of the suffering I endured during my prison life, none equaled it.

Many different types of disease plagued the inmates at Florence, and lice were constant irritants. It is not known how many prisoners died at Florence. Power (1991:16) estimated that 2,800 perished there, while Brevet Brigadier General Rusling, in a report to Brevet Major General M.C. Meigs dated May 27, 1866, said that 2,322 prisoners were buried in the main cemetery at Florence (Rusling 1866). Further, he indicated that 416 were buried in a second cemetery. Mitchell (Congressional Record 1869), in his testimony before the Congressional committee investigating the treatment of Union prisoners, stated that additional graves were present around the “old smallpox hospital” located a half mile from the main cemetery, as well as an unknown number of Galvanized Yankees buried in their own cemetery, and ten additional soldiers buried in a trench near the main cemetery. Adding the number of known graves at Florence, the number of dead was 2,748. That represents the minimum number present, and Power’s estimate of $\pm 2,800$ is probably fairly close to the actual total.

One of the most discussed Union soldier casualties at Florence was a woman. Florena Budwin joined the Union Army disguised as a man with her husband so she could be with him. He apparently died in Andersonville, and she was sent on to Florence with many of her prison mates. Her gender was discovered during a medical examination at Florence, and she died of pneumonia on January 23, 1864. She is buried in the main cemetery at Florence, and is the only individual Union prisoner who has a separate, permanent marker (King 1974:38). Eccles (Eccles 1864-1865) wrote on November 4, 1864, that a child had been born of a woman in the stockade who was masquerading as a Union soldier. He further said “the little volunteer should rejoice in the name of ‘Florence’.” That account

was not corroborated in any of the prisoner accounts researched for this report, and may represent a misinterpretation of the Florena Budwin story.

Events

There were few events of note that broke up the tedium of prison life. The most notable exception was an election staged by the Confederates to test the prisoners vote for Lincoln versus McClellan in the 1864 election. That event made enough of an impression on many of the prisoners that the story of the election was repeated in many journals and accounts. Hoster (nd:116) reported that the vote took place on November 8, and that Lincoln won with a 641 vote majority out of 1,900 votes cast. Goss (2001:29) relying on his memory, reported that there were 1,500 votes for McClellan and 6,000 for Lincoln.

Resistance

The resistance of Union prisoners to their Confederate guards began with the first shipment of prisoners that arrived at Florence. As previously discussed, the first prisoner's to reach Florence were herded together in an open field under an inadequate guard. Power (1991:5) indicates that the initial escape at Florence began with men who were gathering firewood and attempted a mass escape. Most of the escapees were recaptured.

The design of the Florence Stockade made escape by tunneling very difficult. Tunnels were attempted, but according to Ripple (Snell 1996:76) "very few prisoners ever escaped by them." Most escapes were attempted by prisoners on work details.

Ripple attempted an escape with a number of men from his orchestra. They were aided in their escape by a sympathetic guard. Their plan was to make their way the 20 miles to the Pee Dee River, cross on the ferry, disable the ferry, and then make their way to the coast. Their plan was endangered from the start, when some of the prisoners showed up inebriated on "pine top", which was probably molasses rum. The group made it a few miles from camp when they heard the pack of search dogs approaching them from a distance. Ripple then left his companions and struck off into the swamps. The dogs caught up with Ripple, and he received severe bites before the guards pulled the dogs off. Those who attempted to escape with Ripple were either recaptured or killed (Snell 1996:125-135).

One escapee or at least attempted escapee is worthy of note. Hoster (n.d. 115) indicated a police judge named Canby escaped with a group of men who were on wood detail on October 31, 1864. Canby apparently enjoyed a position of authority within the Police Club, and would have had special status within the camp. His eventual fate was not conveyed by Hoster.

Many attempted to escape from Florence Stockade, but few of the attempts were successful. A large number of prisoners yielded to the pressure of inadequate food, shelter, and clothing and took the oath of allegiance to the Confederacy to become "Galvanized Yankees". Even that experiment on the part of the Confederates failed because of the resistance of the Union prisoners.

The Confederate Guards at Florence

Much less is known about the day-to-day life of Confederate guards than Union prisoners. Letters and diaries by guards were apparently preserved at a much lower rate than among the Union prisoners. Prisoners were eager to share the story of the privations they went through at the hands of their captors, while the position of guard at a notorious military prison had none of the perceived glamour of participating in military campaigns.

The best information available from the Confederate guards is contained in a series of articles written by Second Lieutenant Thomas J. Eccles, of Company D of Gill's (3rd) Battalion for *The Yorkville Enquirer* under the name "E" (Eccles 1864-1865). He chronicled life at the camp from a decidedly southern viewpoint, but provided at least some information useful for this discussion. Rev. N.J. Holmes (1920) wrote a brief account of his experiences as a young guard at Florence published it in 1920. Walter D. Woods (ca. 1947), who was among the first Confederate soldiers assigned to Florence, published an account of the events at the stockade, which included a detailed account of the attempted mass escape of the prisoners before they were moved into the stockade. The Woods account, like the account by Holmes, offers few insights into the lives of the guards. The meager amount of information about the guards is supplemented by official Confederate reports, and the few records of the camp that have survived.

Organization

The initial guard contingent at Florence consisted of about 150 militiamen, and was composed of "old men and little boys" (Woods 1947). After the attempted mass escape, an additional 100 men that included convalescing soldiers and citizens came from the surrounding towns to supplement the guard force. The 5th Georgia was ordered to Florence soon after, and was eventually replaced by the 55th Georgia (Woods 1947:4, 9, 11). The guard force totaled 1,600 "effective men" on October 12, 1864. There were 1,200 reserve troops, primarily old men and underaged boys, who were organized into five battalions. The 5th Georgia was still in camp, as was a "small company of cavalry, (the 1st South Carolina Cavalry)" detachments of artillery (the 2nd South Carolina Artillery) and one "battery of light artillery (the Waccamaw Light Artillery)." (OR II, VII 1902:972-974).

A report from the camp on November 5, 1864, recorded the camp guards as the 5th Georgia, and reserve battalions under Majors Gill (3rd Battalion), Williams (4th Battalion), Brown (5th Battalion), Ward (6th Battalion), and Meriwether (7th Battalion). The guard force consisted of an aggregate of 1,832 troops, with 1,528 effectives. (OR II, VII 1902:1097-1100). The 5th Georgia left Florence on November 18th (Hoster n.d.:118) leaving behind several officers to assist in running the camp. The camp command had been assumed by Col. Harrison on September 20, but there is no evidence to suggest that elements of the 32nd Georgia accompanied him to Florence. Elements of the 55th Georgia Infantry entered the camp later in November to serve as camp guards (Florence Military Records 1864-1865). A discussion of the 55th Georgia from a NPS website at (<http://itd.nps.gov/cwss/template.cfm>) indicates that only 90 soldiers of the 55th Georgia were posted at Florence. The major portion of the responsibility for guarding the prisoners

at Florence remained in the hands of the reserve battalions after that point until the stockade was abandoned.

The two main regular units posted to Florence, the 5th Georgia and the 55th Georgia, had both suffered major casualties before being posted to Florence. The 5th Georgia had suffered 55 percent casualties at Chickamauga alone, while most of the 55th Georgia had been captured at Cumberland Gap (NPS <http://itd.nps.gov/cwss/template.cfm>). The 5th Georgia left Florence for the front, while the 55th Georgia apparently first provided guards for Andersonville and then for Florence and Salisbury prisons.

Shelter

The guard units faced some of the same issues about shelter as the prisoners. Tents were apparently in very short supply. Eccles (1864-1865), writing on October 7, 1864 remarked:

Our men have exercised much ingenuity in constructing tents and huts, which has infringed greatly on their supply of bed clothes, which will inconvenience them greatly when winter sets in. If Gen. Chestnut would supply the tent cloth flies could easily be made; or plank could be, as a saw-miller nearby offers to furnish it, if a requisition is made.

An article from Eccles (1864-1865) dated October 28, 1864, provided additional insights into the nature of guard shelters when he said:

We have manage to get two tents to each company in the battalion, one for the officers and the other a sort of refuge for the sick but those who have not the industry and the skill to construct cabins, are still uncomfortably confined to their earthworks, composed of poles crossed transversely over forks, covered with pine boughs, and this with dirt-rather a muddy substitute for lime and mortar.

It appears from Eccles' observation that some of the guards were living in shelters much like those built by prisoners.

At least some of the guards improved their shelters as winter approached. Eccles (1864-1865) reported on November 24, 1864:

Today the sun shines out beautifully, and all hands are building chimneys, as though they expect to stay here for winter quarters. Our chimney is of the latest pattern, the outside being a good imitation of an old field pine, with a chicken coop rampart, while over the mantle piece, inside, is a classic mirror, with a 'devil face in it.' Both though they do not add to the beauty of the landscape, they are very comfortable, and that was the end aimed at.

The guards apparently were comfortable with their quarters by late January, as Eccles (1864-1865), writing on January 27, 1865 stated:

The weather has been very wet and cold, so that those who have been anxiously looking for a removal, now express a willingness to remain until the winter is over, as they are generally well provided with comfortable cabins or tents, with chimneys attached.

Andrews (2001:93) described the guard quarters as being log houses, and indicated that they were organized into villages both east and west of Pye Branch. The log houses are likely what remained of the guard quarters, as tents would have been removed with the guards as they left Florence.

Equipage

The guard force assembled at Florence was a ragtag group of reserves composed of boys too young to serve in the regular army or men who were too old to post to regular units. A report on Company A or the 3rd Battalion of the South Carolina Reserves filed by Captain M.W. Coleman of the 4th Battalion of the South Carolina Reserves on December 31, 1864 stated that the discipline of the company was “good”, their instruction was “fair”, their military appearance was “ordinary”, their arms were “inferior”, their accouterments were “none received”, and their clothing was “private” (Friends of the Florence Stockade Newsletter Spring 2006:11).

An “invoice of ordnance and ordnance stores” turned over by Captain H.S. Ingraham, Assistant Chief Ordnance Officer to be sent to Florence provides one of the few insights into military items sent to Florence for use by the guards. The items on the list included one 6 pounder iron Napoleon cannon and a second 6 pounder gun; two 6 pounder carriages and limbers; four rammers and sponges; one gunners gimlet and four handspikes; one gunners level and four priming wires; four landyards and two tube patches; four thumbstalls and two vent patches; two field worms and two vent covers, 22 spherical case shot, fixed; 112 6 pounder canister, fixed; 300 muskets and bayonets, caliber .69; 12,000 musket buck and ball cartridges, .69 caliber; 100 friction primers; 40 paper fuses; and 35 packing boxes (Florence Military Records 1864-1865).

It appears that the reserves were not issued military accoutrements, and had to supply their own items like canteens. They arrived at Florence with inadequate clothing and little or no gear. The condition of some of the reserves was extreme, as is reflected in a morning report dated November 23, 1864 by Major James W. Ward of the 7th Battalion of the South Carolina Reserves (Florence Military records 1864-1865). He said:

I notice that many of the poorer class of boys who belong to this command are barefoot and only Cotten Clothes and for them to be placed on post for 2 hours such a night as the last was, without any chance of fire is at once destroying their constitution is not life. I think that is they cannot be furnished by the government shoes and clothes, they should at least be send home for a week or so on furlough to work for them or at least be allowed a little fire near the line to warm their toes in passing along post, a thing which I understand was attempted but was refused them.

The reserve guards were probably armed with a patchwork of obsolete military weapons and private arms. A monthly report prepared by Captain John C. Rutherford on November 5, 1864, indicated that the duty roster consisted of six commissioned and seventeen noncommissioned officers, with 336 privates. Those on duty manned the sentry posts around the prison and served on other assignments inside and outside of the prison. The 300 .69 caliber muskets issued to the camp on September, 1864, were nearly sufficient to arm the sentries that were on duty at any given time. This would mean that the rest of the guard force would have been unarmed, which is unlikely because of the ever present threat of Union raids.

Social Networks

The social networks within the guard community were likely more elaborate and stronger than the bonds formed among the prisoners. The Reserve units were drawn from districts within the state (Figure 8), and the companies were probably comprised of individuals who knew each other before they were pressed into service. As an example, Gill's Battalion was made up of men from the Union, Fairfield, York, and Chester districts. Eccles (1864-1865) wrote his articles for the Yorkville Enquirer in York, South Carolina, doubtless serving the desire across the community for news of those serving from the York District (Knudson 2003).

The relationships between the Reserve troops and the regulars from the Georgia units appear to have been somewhat strained. At one point Eccles (November 18, 1864) remarked the "Reserves, generally, do not care to be under any obligation to the Georgia Commandant." That strained relationship was probably to have been expected, though, and the army regulars undoubtedly believed they were superior soldiers to the somewhat rag-tag members of the Reserves.

Diet

Relatively little is known about the diet of the guards at Florence. Eccles (1864-1865), writing on November 4, 1864 stated: "They (the prisoners) are well fed, drawing the same rations we do, but they crave vegetables, which except potatoes, are not to be had by any of us." Eccles asserted what became a standard statement by southern traditionalists, who still hold that the Confederate guards ate the same food as the prisoners, and any shortages of food were basically shared. That apparently was not the case. The illnesses recorded among the guards that will be discussed below were not caused or aggravated by malnutrition or starvation, and there is no evidence that scurvy was an issue among the guards. As has already been discussed, the Florence Stockade was not a world within which all prisoners were treated equally. Some prisoners received more food than others, based on the work they did for and within the prison. The Confederate guards sat atop the pyramid at Florence, and doubtless received better treatment and rations than the favored prisoners.

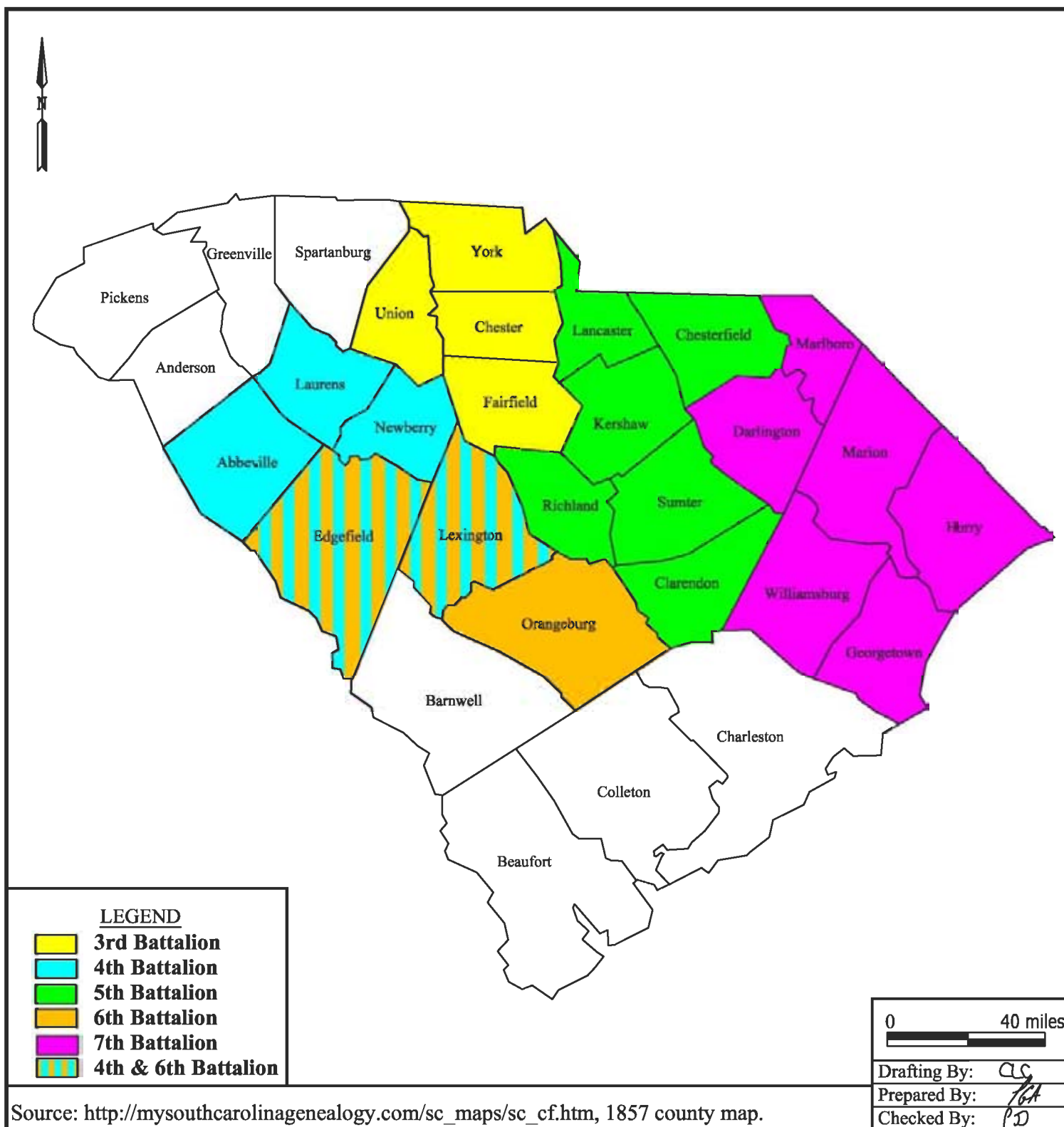


Figure 8. Counties of origin of the South Carolina Reserves stationed at Florence.

The official U.S. Army daily ration from 1861 through 1864 included 20 ounces of fresh beef that could be substituted for with 20 ounces of salt beef, 12 ounces of pork, or 12 ounces of bacon. The flour ration included 18 ounces of flour, which could be substituted for by 18 ounces of soft bread, 12 ounces of hard bread, or 20 ounces of corn meal. The vegetable rations included 1.2 to 2.4 ounces of beans, which could be substituted for with 2.4 ounces of peas, 1.6 ounces of rice, 1.5 to 3 ounces of dried potatoes, 1 to 2 ounces of dried mixed vegetables, or 6.6 ounces of potatoes. The coffee and sugar ration included 1.6 ounces of green or 1.28 ounces of roasted coffee beans, which could be substituted for with 1.28 ounces of tea. The ration included 2.4 ounces of sugar, The condiments ration included 2.56 ounces of vinegar, 0.6 ounces of salt, and 0.04 ounces of pepper (Brennan 2005:33-34).

The Confederate army issued much smaller rations than the U.S. Army, but even half rations would have been considerably more than the prisoners received at Florence. It is impossible to judge from existing sources how closely the Confederate guard diet paralleled the U.S. Army standard, but it was probably much closer than the rations issued in the stockade.

Eccles (1864-1865) indicated in an article dated October 7, 1864, that water at the camp was “scarce, and not good.” The reserve troops attempted to dig wells when they first arrived at camp, but were unable to complete the wells because of a lack of “spades, shovels, or picks.” Three wells were found during the current archaeological excavations that had been dug to a depth of over 20 feet, so that problem was eventually solved, but the slave labor used to build the stockade apparently was not available to the guard force to help prepare their camps.

Health

The comparative health of the guards and the prisoners is one measure that can be used to view the disparity in diet, medical care, shelter, and clothing between the two groups. The severe health problems that sprang from malnutrition and starvation, filthy living conditions, inadequate shelter, and insufficient clothing have been well documented for the prison population. Approximately 2,800 prisoners died at Florence during its short history, and many more left Florence in extremely poor health. The health issues faced by the guards appear to have been of a totally different magnitude with different root causes than those of the prisoners. Eccles (1864-1865) reported on the health of his battalion in his reports from Florence. He reported on October 18th that there were “many” from the battalion in the hospital with “fever, measles, and mumps, but most of them are doing well.” He reported on November 2nd that there were still cases of measles and mumps “among the boys,” but there was little other illness in the battalion. The cases of measles and mumps continued through November 11th, but Eccles reported on that date that those diseases had “nearly run through.” By November 18th the epidemic of measles and mumps was nearly at its end, and only one member of the battalion was in the hospital. Two members of the battalion had died by December 2nd, but there were no new cases of illness reported. One case of smallpox was reported within Eccles’ battalion by January 27th, at a time when the disease was loose in the stockade.

The disease reported by Eccles from the 3rd Battalion were epidemic diseases that could have been contracted by otherwise healthy individuals. It is not known if the excellent state of health enjoyed by the 3rd Battalion was reflected within the other guard battalions, but none of the monthly reports or correspondence from the camp indicated that there was a remarkably high mortality rate among the guards.

Events

Few events punctuated the day-to-day lives of the Confederate guards. The single event that stands out at Florence is the presidential election in November, 1864, in which the Confederate jailers had the prisoners conduct a straw vote between Lincoln and McClellan for the presidency of the Union. Eccles reported that the final vote was 1,284 for Lincoln to 619 for McClellan, for a difference in the votes of 665. This compares very favorably with the 641 vote margin in favor of Lincoln cited by Hoster (n.d.:116). Walter D. Woods (ca. 1947:11), who was a guard at Florence, remembers the outcome of the election in a different way, and said that Lincoln only received 2,000 votes out of 12,000 cast. He further said that the prisoners requested that the outcome of the election be sent though the lines to the north, but that they did not receive a reply to that information. Eccles' account of the election was clearly more accurate than that of Woods, which appears to have changed the event to imply that the prisoners were sympathetic to the Southern cause, which most were not.

Prisoner/Guard Relations

The Southern view of the way prisoners were treated in the Confederate prisons has differed radically from that expressed by the former prisoners. There is ample evidence, as presented above in this chapter, that at least some Confederate officials worked hard to improve the lives of those incarcerated at Florence. At the same time, the Union policy of suspending prisoner exchanges led to a high mortality rate and a great deal of misery for their troops held in southern prisons.

There were doubtless many villains and heroes at Florence, but most of the ire of the prisoners was focused on Lieutenant and later Captain James Barrett, who originally was posted to Company C of the 5th Georgia Infantry. Barrett first enlisted as a private in Company I of the 8th Georgia Infantry on June 7, 1861, and was discharged due to a disability at Richmond County (Augusta), Georgia, on August 12, 1861. He reenlisted in Company C of the 5th Georgia Infantry on August 18, 1862. He was elected 2nd Lieutenant of Company C in June, 1863, and remained a lieutenant through 1864. He was posted to Florence with the rest of the 5th Georgia, and became "Inspector of Military Prisons" at Florence in November, 1864. He retained that title until he was elected Captain of the 2nd Foreign Legion (8th Battalion Confederate Infantry) of "galvanized Yankees" on December 26, 1864 (Rigdon 1997:89). Nothing more could be found about his military career during the current research.

The prisoner's view of Barrett was best presented by Ripple (Snell 1996:116), who said:

I now come to one of whom I find it impossible to say one word of praise, or for whom to offer one word of excuse. A braggart and a bully when

armed, among unarmed men his general style and manner made me believe he was a coward at heart. He was Lt. Barrett and he was known throughout the prison as a redheaded devil. I do not believe he had ever been at the front, for he did not have any of the characteristics of a man who had seen service. Among all the prisoners who ever saw him, I have yet to find one who could say a good word for him. He would take delight in torturing men and witnessing their agonies. He would cut off rations for a fancied offence. He would come to the gate from time to time to distribute the rations for the day, when hundreds would be waiting in front of the gate, and in a tone of voice that could not be one quarter of the way through the dense throng would order them back, and then if the order was not promptly obeyed, as it was sometimes impossible to do, so great was the pressure behind, would draw his revolver and with a savage oath fire into the midst of the crowd. His ambition, as he told, was to make the Yanks afraid of him. It did not have this effect, but it made us hate him.

Ripple punctuated the passage presented above with a drawing, which is presented as Figure 9. That drawing is not fully accurate, as it shows Barrett firing into the primary residential area of the prisoners, which was east of Pye Branch. Rations were issued through the main gate on the west side of Pye Branch, where no shebangs would have been located. Despite the inaccuracies, the image is still of interest, as it conveys an event, and presents a view of the residential area that provides an impression of what that area may have looked like.

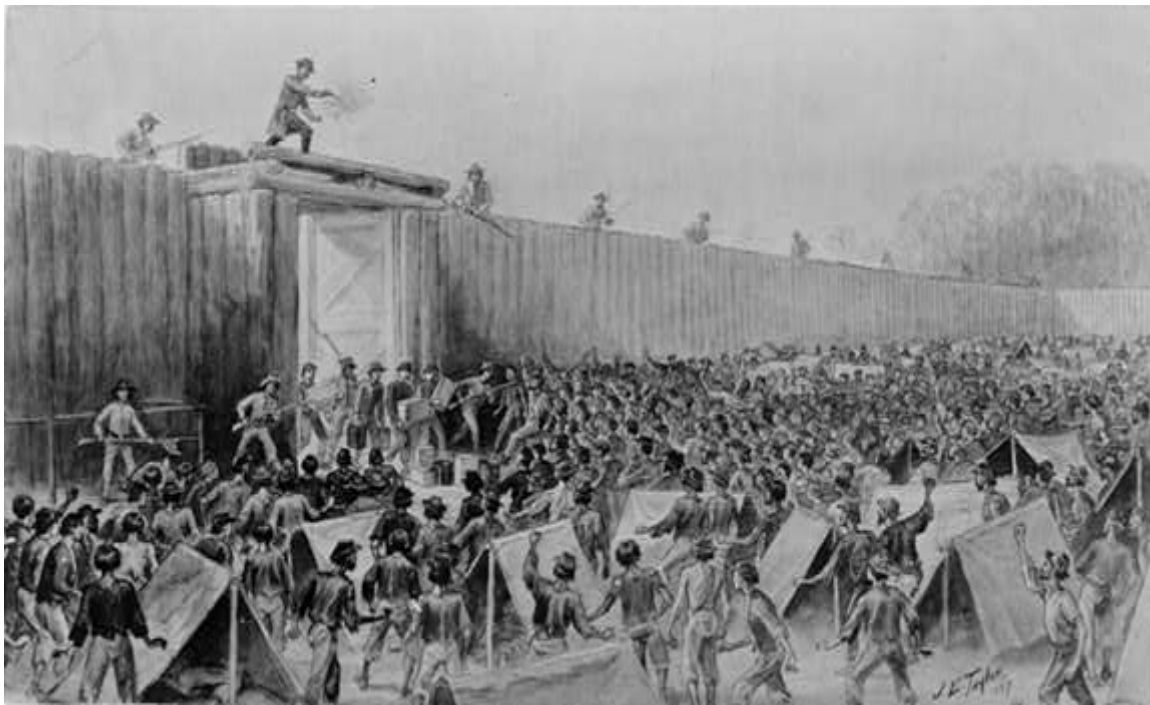


Figure 9. Lt. Barrett Firing on the Prisoners (Snell 1996:117)

J. Holt, Judge Adjutant General, writing to E.M. Stanton, the Secretary of War on November 3, 1865, presented recommendations concerning which former Confederate prison officials should be prosecuted for war crimes (OR II, VIII, 1899:782-883). His recommendations followed the trial of Capt. Henry A. Wirz, who had convicted of war crimes for his role as commander of Andersonville Prison. His recommendations stated in part:

That Lieutenant Colonel Iverson, Forty-Seventh Georgia Volunteers, and his subordinate, Lieutenant (or Captain) Barrett be arrested and brought to trial for their treatment of our soldiers when prisoners of war at Florence, SC. The testimony fixes upon them not only a series of most cruel and inhuman acts or neglect, abuse, assault, robbery &c, but a considerable number of well established homicides. In these Barrett was the principal agent, but Iverson, as his commanding officer, was clearly no less criminal.

Holt also indicated “Lieutenants Wilson, Cheatham, and Mosely, of the Florence prison should also be prosecuted. The five from Florence joined a long list of Confederate prisoner commandants and officers recommended for prosecution. He closed his correspondence by indicating that Iverson could be apprehended at Columbus, Georgia, while Barrett could be found at Augusta, Georgia.

Despite Holt’s recommendations, Wirz remained the only Confederate prison official tried and found guilty for war crimes. Wirz was executed by hanging.

Post-Civil War Florence

The earliest available account of the Florence Stockade after the removal of the prisoners was written by Sidney Andrews on October 19, 1865 (Andrews 2004:92-97). He toured the South after the Civil War and wrote articles about what he found for the *Chicago Tribune* and *Boston Advertiser*. His articles were highly critical of the South and southerners in general. He described Florence as:

...a point at which three railroads center, rather than a town. There is a hotel, and a church, and a machine shop, and two so-called stores, and three bar rooms, and twenty-five or thirty residences, and a great pine forest...The town is a railroad eating-house, with sleeping-rooms attached.

Portions of Andrew’s description of the stockade have already been cited in this section. He walked around the stockade recording his impressions, and adding some additional dimension to the rest of the historical record. He put more of a human face on the prisoners when he described the evidence of games played by the prisoners such horseshoes, cricket, games with bows and arrows, checkers, and cards. His most poignant find in the stockade was a daguerreotype of a woman in her mid-forties and two younger women or girls that must have represented a mother and her two daughters that was found tucked into the thatching in a shebang.

James F. Rusling (1866), Brevet Brigadier General and Inspector for the Quartermaster Corps wrote a report dated May 27, 1866, that described his visit to the Florence Stockade and cemeteries. He indicated that the village of Florence had about 200 residents at the time. The main cemetery had been marked by a board fence that had been whitewashed by the time of his visit. Lieutenant Colonel Thomas apparently had seen to enclosing the main cemetery and marking the secondary cemetery by that time. He indicated that the Confederate prison records were not to be found, and that they had probably been hidden or destroyed by former Confederate officials to shield those who had commanded and served as guards at the prison. He indicated that the prison hospital had consisted of “a decent looking sort of cabin,” which seems to support the Kellogg (1868:326) description of that facility. General Rusling recommended that the two larger cemeteries at Florence be “consolidated into one.” He further recommended that the other cemeteries in the vicinity and on the coast be consolidated with the main Florence cemetery. His plan appears to have been the moving force that created the old section of the National cemetery in its present form. As a post script to his report General Rusling indicated that he had directed Lieutenant Colonel Thomas to take photographs of the stockade and cemetery to be forwarded to Brevet Major General M.C. Meigs, Quartermaster General of the United States, who had been the recipient of the Rusling report. Those photographs were not found during the current research, and it is not know if they were taken or, if taken, have survived.

Two land plats were identified by Grunden and Holland (2005:20). A plat dated to 1874 (Figure 10) locates the stockade, a feature labeled “old line ditches” that probably corresponded to the western line of rifle pits, a feature that may have been a bastion, and an extension of the ditch line to the northeast that probably was an extension of the stockade fortifications. The National Cemetery, as it then existed, is shown near the northern edge of the map, and a second cemetery is shown a short distance south of the National Cemetery. The second cemetery appears to be off of the National Cemetery extension, and on the grounds of the currently-occupied state-owned disabilities and special needs facility. A 1909 image (Figure 11) does not extend as far north as the 1874 image, and does not include either cemetery. An earthwork not shown on the 1874 image is shown extending from the northwest corner of the stockade, from which it extended north-northwest until it joined the ditch on the 1874 map interpreted as the northeast extension of the rifle pits. A second possible earthwork paralleled the western bank of Pye Branch.

A master plan for the preservation and interpretation of the Florence Stockade was prepared by Jaeger Company in 2005. That report, as cited in Grunden and Holland (2005:21) indicated that by 1937 the eastern end of the stockade was still very well preserved, but the western end had been plowed and leveled. The east end of the stockade remains very well preserved as of this writing. The west end has been extensively impacted through soil removal, although at least some archaeological resources have survived there (Leader 1997). Traces of what may have been a section of the rifles pits have survived west of the stockade, while earthworks believed to have been parts of the western fortifications remain in a good state of preservation.

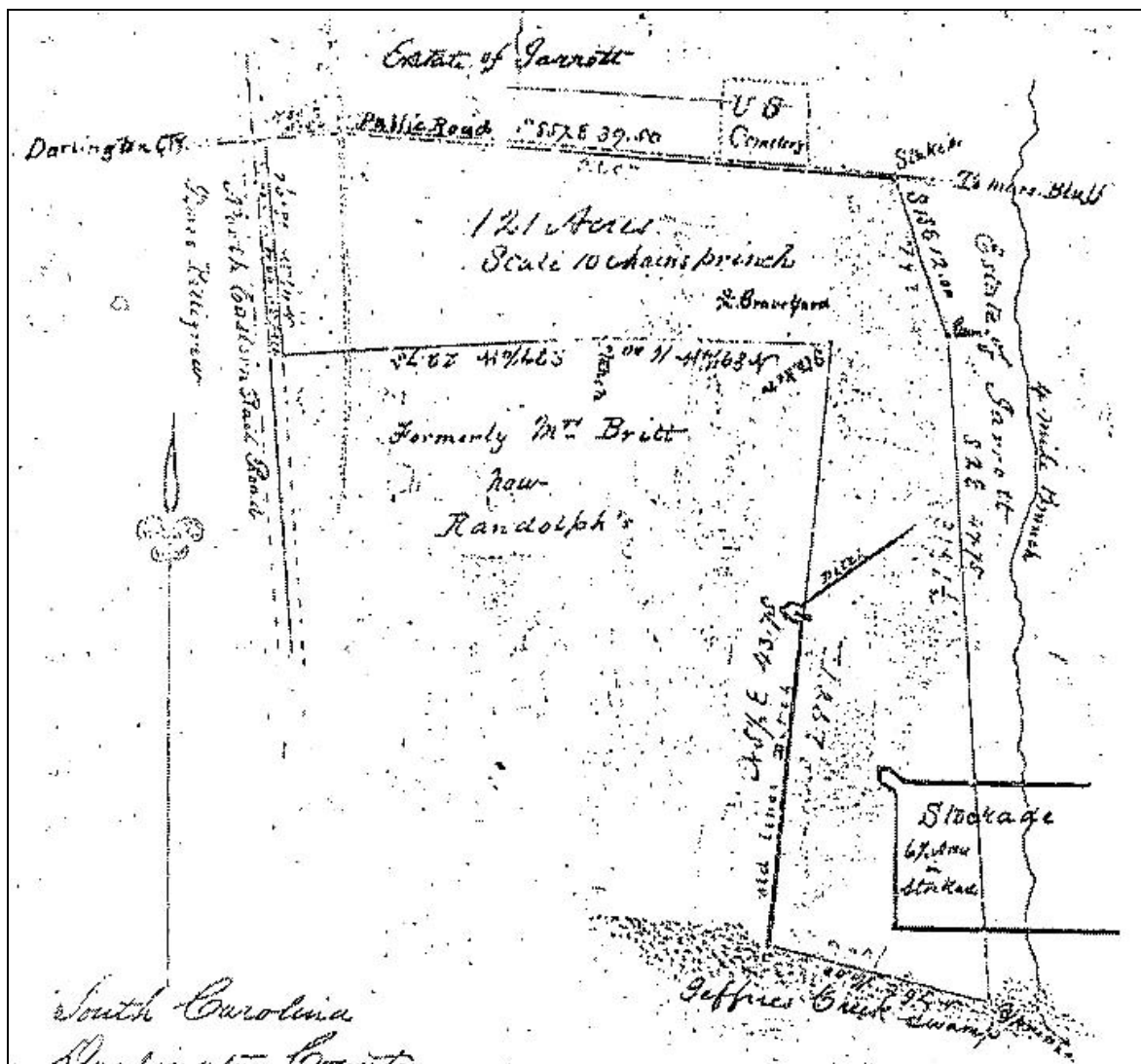


Figure 10. 1874 Plat Map (Grunden and Holland 2005:20).

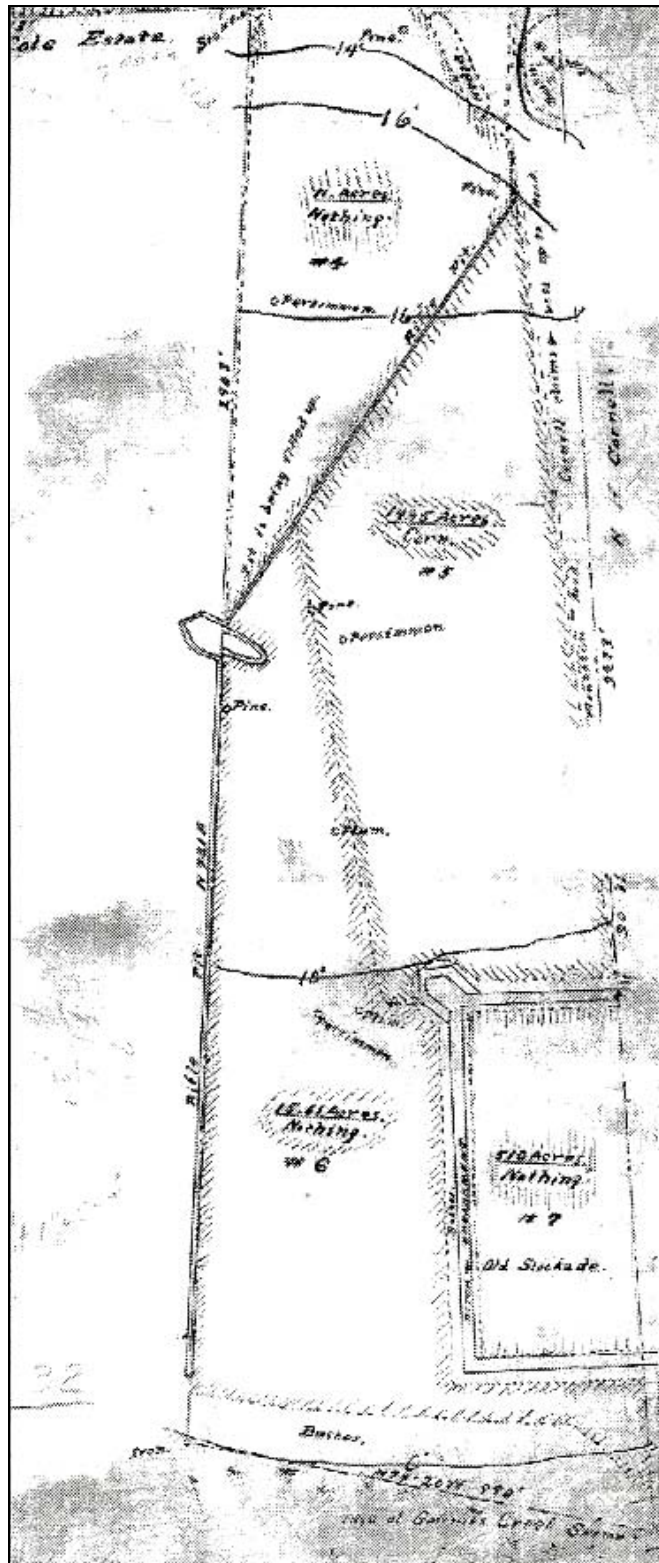


Figure 11. 1909 Plat Map (Grunden and Holland 2005:20).

CHAPTER 4. FIELD RESULTS

The removal of the plowzone from the 10-acre project area revealed 372 previously unrecorded features (Figures 12-12d). Combined with the 149 features identified during the Phase II testing, the total number of features recorded from the site totals 521 (Appendix A). Of this total, 179 features were excavated. In order to facilitate analysis of the functional and spatial relationships of the features, each feature excavated was assigned to one of ten general categories based primarily on size and shape in both plan and profile. Each category is described below.

Structures

Eight rectangular and square features were interpreted to be the remains of huts or similar structures inhabited by the Confederate guards at the Florence Stockade (Figure 13). This interpretation was based on the regular shape and size of the features along with the presence of either a hearth or a burned area where a stove was likely located. There was considerable variation in the size of each feature, but this is likely attributable to the personal taste or abilities of the inhabitants or the availability of materials. They also varied significantly in the depth of the excavation, which is probably also attributable to the builder's preference and form of structure, but may be influenced by topography or taphonomic processes. Examples of features similar to these have been reported from other Civil War encampments (Bentz and Kim 1993, Nelson 2006, Thoms 2000).

The organization of a Civil War camp was dictated by army regulations (Confederate States War Department [CSWD] 1863, United States War Department [USWD] 1861), but little guidance was provided on the type of shelter used within the camp. The type of shelter issued to the foot soldier varied with the proximity of the unit to a supply depot and the role of the unit (Nelson 2006, Whitehorne 2006). Troops on campaign were typically issued one shelter half, which could be attached to another half to form a two-man tent, called a "dog tent" (Nelson 2006:179). Shelter halves had the advantage of being light weight, but provided minimum shelter due to their small size and light construction. Wedge tents were also used in the field and were more popular with the troops. Similar in shape to a dog tent, the wedge tents were larger, had enclosed ends and were of one piece construction which made them more weather-proof. They were often adapted for winter quarters by placing them on wooden platforms (Whitehorne 2006).

Troops in more long-term encampments, such as those in winter quarters or attached to a permanent post, were accommodated in a number of different types of shelter. During the early years of the war, Sibley tents were widely used. The form of the Sibley tent is discussed later in this chapter. Wall tents were also common, especially near major supply depots. With vertical walls to allow more headroom and enclosed ends to keep the elements at bay, they were popular but heavy. Although field officers were issued small wall tents, the larger versions were generally restricted to the rear (Nelson 2006, Whitehorne 2006).

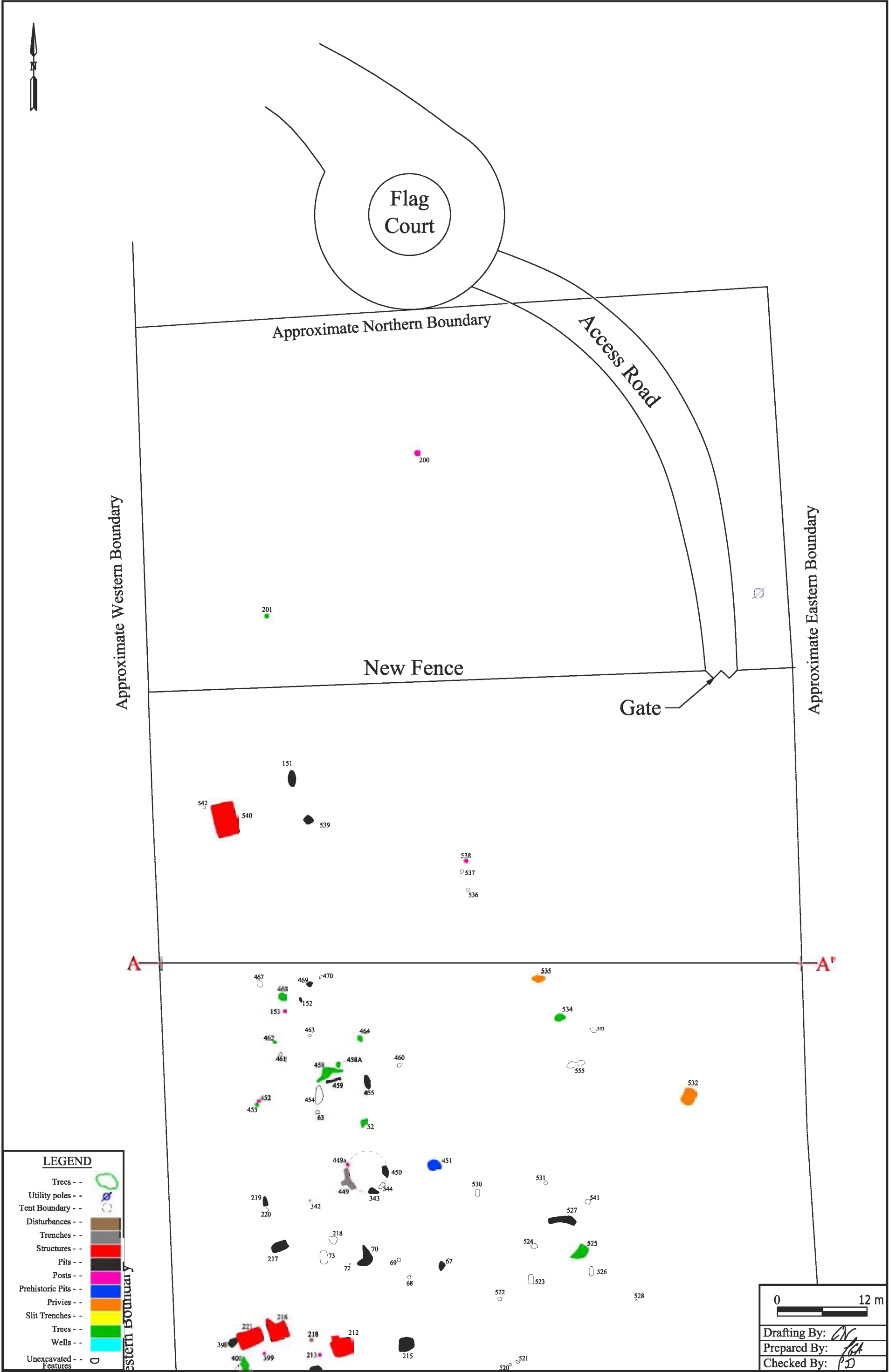


Figure 12a. Detailed feature location map.

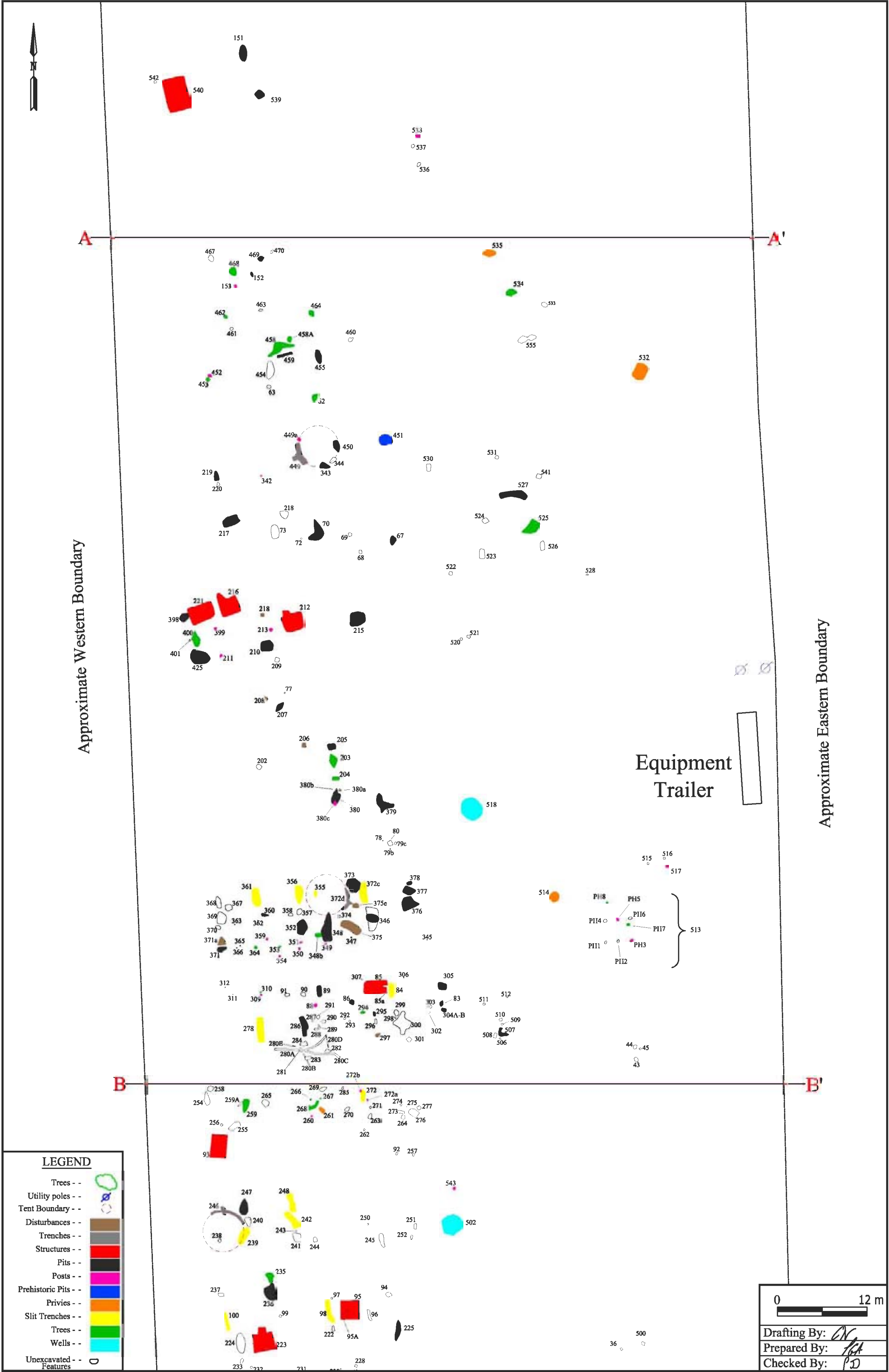
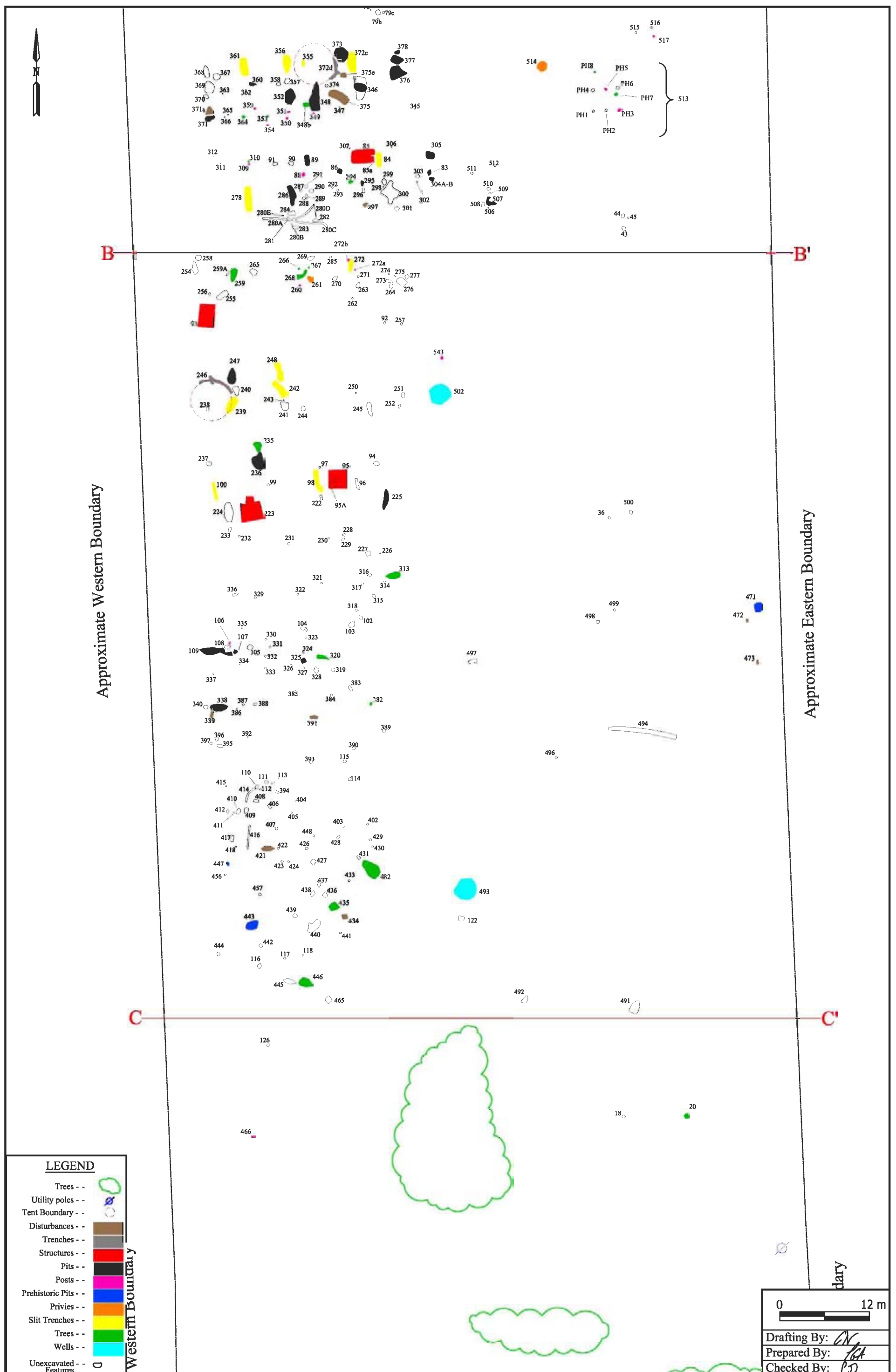


Figure 12b. Detailed feature location map.



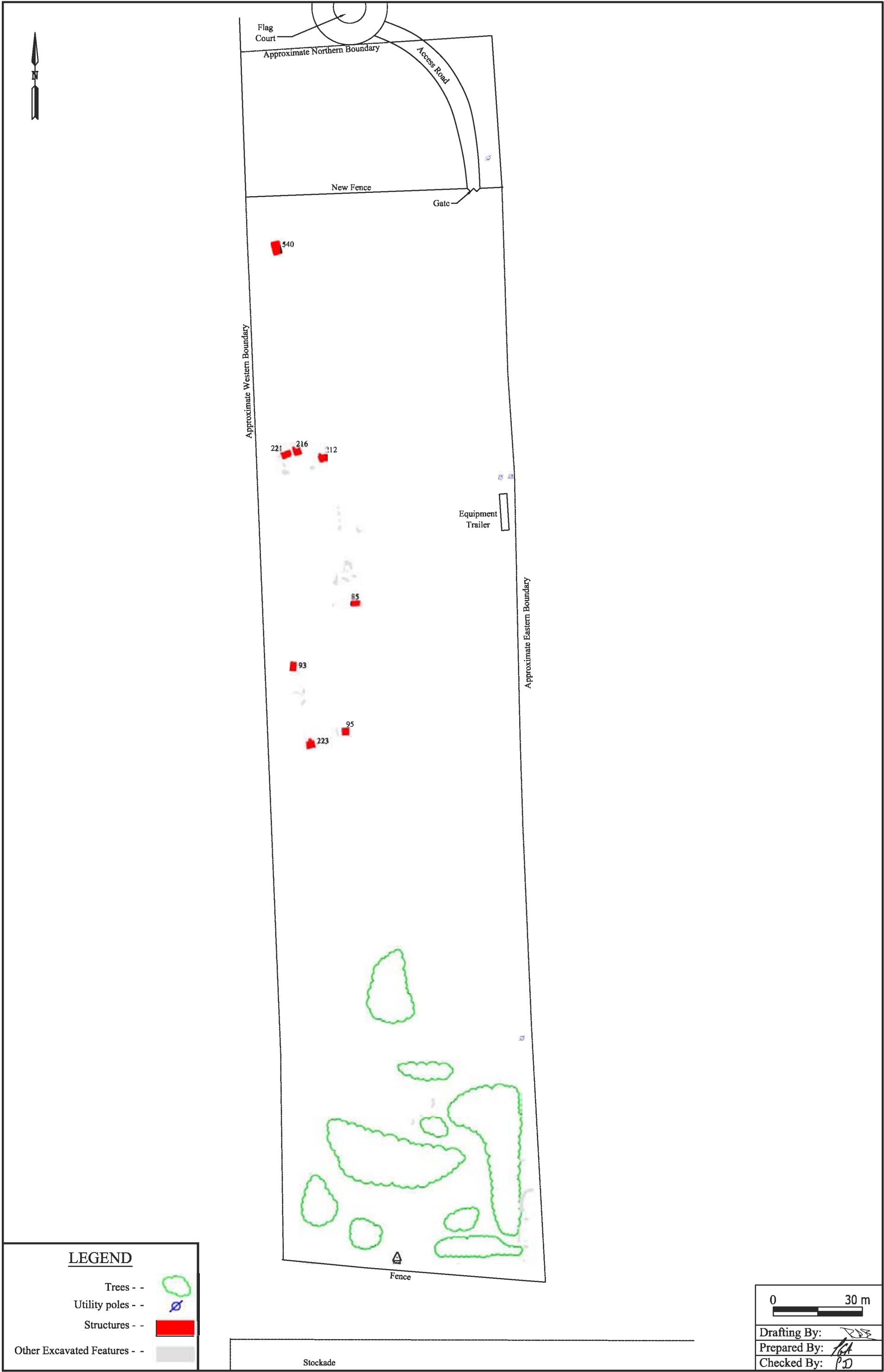


Figure 13. Excavated structures.

The most permanent form of shelter for rear echelon troops was a form of hut or cabin, which could be constructed in any number of ways. The ideal was a small frame structure with plank walls and a plank roof. It was rare, however, that sawn lumber was available for such construction. It was more common for huts to be constructed of stacked logs, with a roof built with poles and covered by combined shelter halves, pine boughs or both. The size of the hut was restricted by the materials available, especially if the roof was to be covered by shelter halves. The amenities included in a hut varied with the availability of materials, but examples including hinged doors and glazed windows were common. Huts usually had some form of hearth or stove, with a chimney or flue. Where logs were scarce or time was not available to split enough for walls, a form of semi-subterranean construction was utilized. A hole corresponding to the desired size of the hut was excavated three to four feet into the soil, then short log walls erected around it. The dirt walls and floor were clad in boards if available, while the roof was covered with combined shelter halves. Chimneys were typically placed at a gable end of the hut and were constructed with bricks, barrels coated in mud or sticks and clay (Nelson 2006, Whitehorne 2006).

Feature 85

Feature 85, partially exposed by TRC during the Phase II testing, was a rectangular hut feature located in the northwestern quadrant of the project area and measuring approximately 300 cm in length and 183 cm in width (Figure 14). The actual walls of the hut likely measured approximately eight feet in length by six feet in width, covering an area of 48 square feet. The long axis was oriented east/west. An area of burned soil marked the boundaries of the hearth near the southeast corner of the feature. A semicircular extension off the northeast corner likely represents an entryway into the hut. A plow scar had impacted the western edge of the feature.



Figure 14. Plan view of Feature 85.

The feature was excavated in quadrants in order to allow complete profiles of both the north/south and east/west axes to be recorded (Figure 15). It extended a maximum of nine centimeters below the truncated ground surface, but was more shallow in the southwest corner. The soils were generally mottled silty sand indicative of intentional filling of the hole. However, an area with numerous thin lamellae was noted in the eastern half of the feature, which may indicate that a portion of it was filled by water-borne soils. A layer of charcoal was located on the floor of the western end of the feature while another was noted within the fill matrix near the center. Artifacts were present in all strata.

The soils within the hearth were excavated separately. The edges of the hearth were clearly defined by packed burned clay. A layer of orange clay, likely derived from the hearth itself, overlaid a layer of charcoal and ash, which covered the base of the hearth.

Feature 93

Feature 93 was a rectangular structure located near the western boundary of the project area in the northwestern quadrant and was recorded by TRC during the Phase II testing (Figure 16). The feature measured approximately 327 cm in length by 215 cm in width and was oriented with the long axis north/south. The structure likely measured 10 feet by 7 feet, covering an area of 70 square feet. The feature was bisected by a modern water line that ran southwest to northeast across the site. The pipe was laid in a narrow trench, so disturbance was minimal. The surface of the feature was highly mottled but the boundaries were distinct.

The feature was excavated in quadrants in order to allow the complete profiles of both the north/south and east/west axes to be recorded (Figure 17). Feature fill consisted of a series of mottled silty sand strata that indicate that the feature was probably intentionally filled. An area of burned sandy clay was noted in the center of the structure while an extensive area of the same covered the base of the northeast corner. A concentration of charcoal was noted between the two. The area in the center could be the location of a stove, but the burned area in the corner would seem to indicate the presence of a hearth and chimney. No clearly-defined hearth was noted and the burned area extends beyond the boundaries of the feature.

Feature 95

Feature 95 was recorded by TRC during the Phase II testing. While TRC only uncovered a portion of the feature, they encountered a human burial within the structure. During the current project, the complete exposure of the feature revealed that it was roughly square in plan and measured approximately 226 cm (7.4 feet) north/south by 222 cm (7.2 feet) east/west (Figure 18). The feature was excavated in quadrants in order to allow the complete profiles of both the north/south and east/west axes to be recorded. The human remains were removed by Dr. Nicholas Herrmann of the University of Tennessee Archaeological Research Laboratory (ARL) assisted by members of the MACTEC crew. The excavation and analysis of the remains are detailed in Chapter 6.

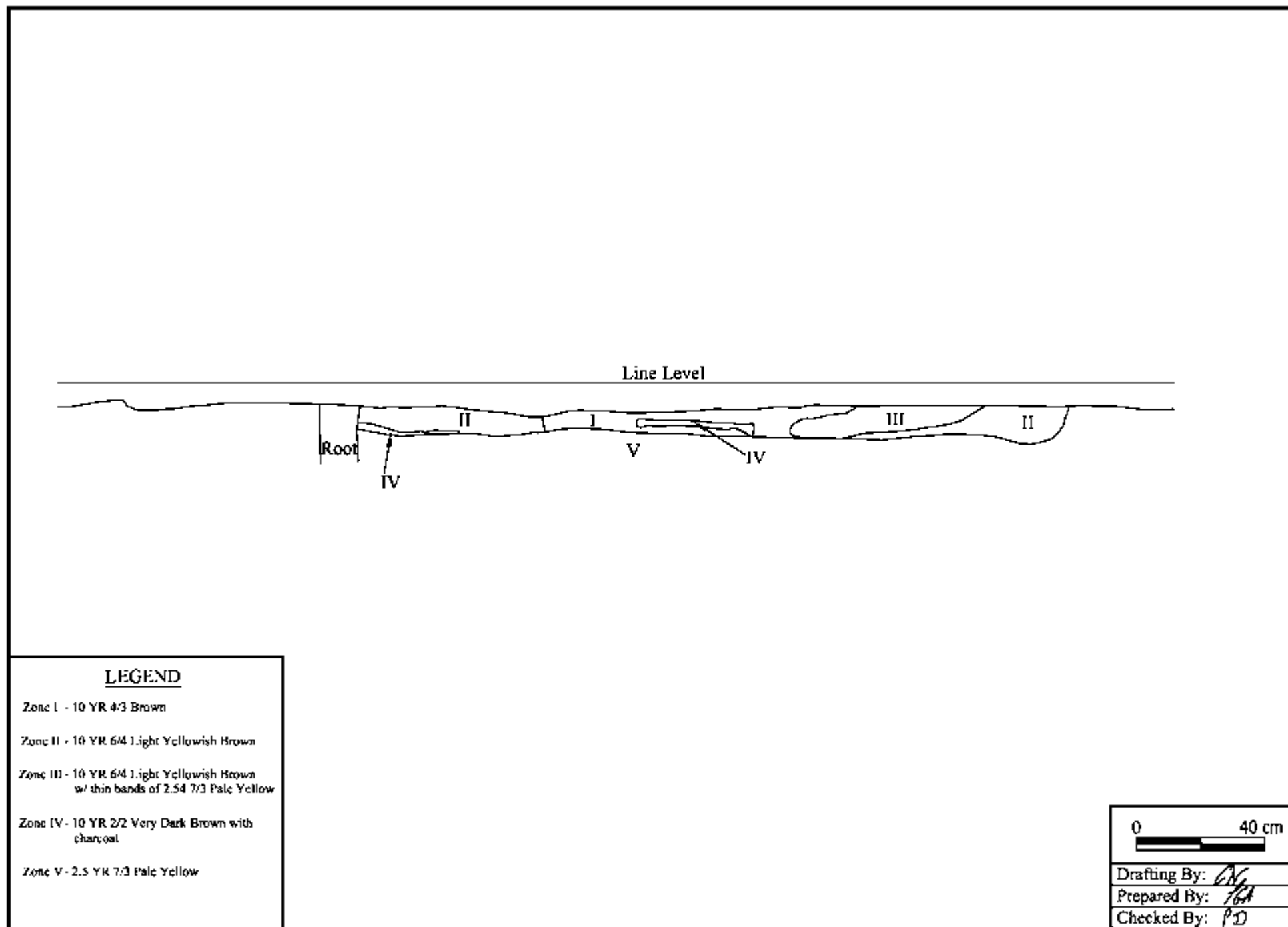
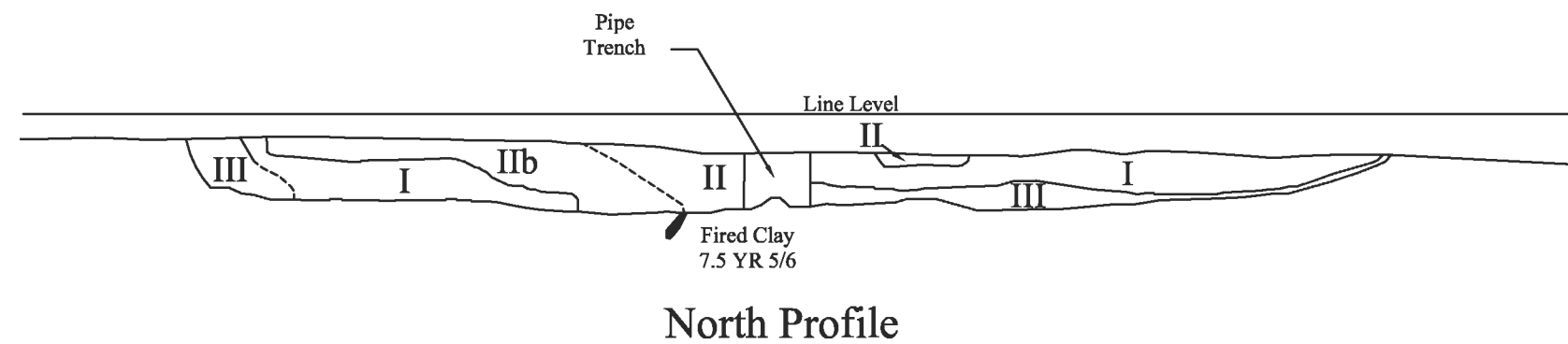
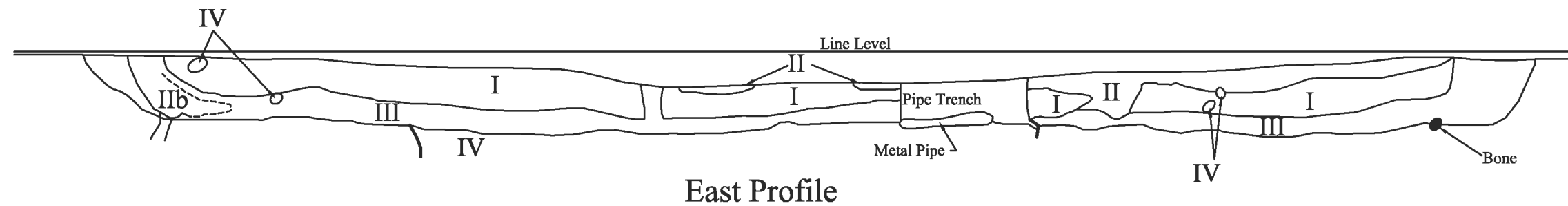


Figure 15. Feature 85, south profile.



Figure 16. Plan view of Feature 93. The linear disturbance running diagonally across the feature is a trench for a modern water pipe.



LEGEND

- Zone I - 10 YR 6/4 Light Yellowish Brown
- Zone II - 10 YR 3/4 Dark Yellowish Brown
- Zone IIb - 10 YR 3/4 Dark Yellowish Brown mottled with 10 YR 5/4 Yellowish Brown, 10 YR 6/4 Light Yellowish Brown and 10 YR 5/6 Yellowish Brown
- Zone III - 10 YR 5/4 Yellowish Brown
- Zone IV - 7.5 YR 5/6 Strong Brown

0 30 cm

Drafting By: *AN*
 Prepared By: *AGA*
 Checked By: *PD*

Figure 17. Feature 93, east and north profiles.



Figure 18. Plan view of Feature 95.

Based on its size and shape, Feature 95 was interpreted as a hut or cabin despite the presence of the burial. It is very similar in size to other square huts excavated on the site, at slightly larger than seven feet on a side and covering a little more than 49 square feet. No hearth or area of burned soil where a stove may have been placed was noted. The fill was composed of thin layers of sand that may have partially accumulated over time. This is unclear as the feature only extended 10 to 15 cm below the truncated ground surface.

Feature 212

Feature 212 was a large square feature measuring 254 cm east/west by 227 cm north south, excluding the rectangular hearth located just west of the center of the north wall (Figure 19). The structure likely measured slightly less than eight feet by eight feet, covering an area of 64 square feet. This was the first hut excavated during the current project. The south half was removed first, which revealed that the fill was a homogenous silty sand (Figure 20), but was more red in the area of the suspected hearth. The fill extended to a depth of no more than 15 cm below the truncated ground surface. The majority of the artifacts were recovered from the floor of the hut, which may indicate that the feature was filled shortly after it was abandoned. The hut was disturbed by two intrusive modern post holes, one of which contained the rotted remains of the post complete with barbed wire.



Figure 19. Plan view of Feature 212.

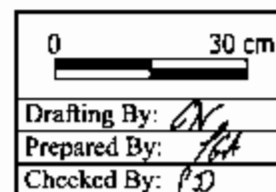
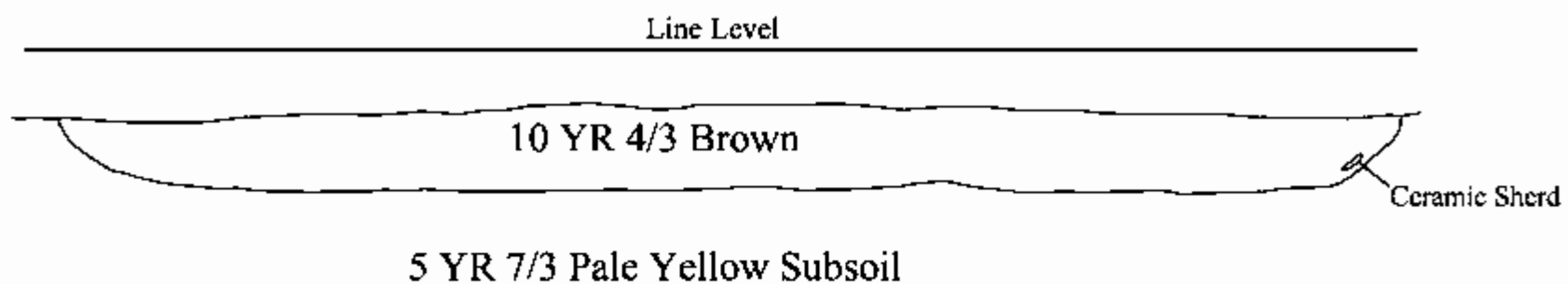


Figure 20. Feature 212, north profile.

The hearth was not clearly defined, but was identified by its shape and the presence of a concentration of charcoal, calcined bone and fragments of burned sandy clay. It appears that this hearth was not lined to the degree as the one identified in Feature 85.

Feature 216

Feature 216 was located just west of Feature 212 and was very similar to it in form and size. It was roughly square and measured 296 cm east/west by 245 cm north/south (Figure 21). An apparent hearth was located just west of the center of the north wall of the hut. The feature was excavated in halves, with the profile revealing a generally homogenous fill (Figure 22). Two slightly different soil strata were located at the base of the fill near the center of the feature. The fill was slightly deeper than Feature 212, extending approximately 30 cm below the truncated ground surface. It appears that the feature was filled in one episode shortly after the hut was abandoned.

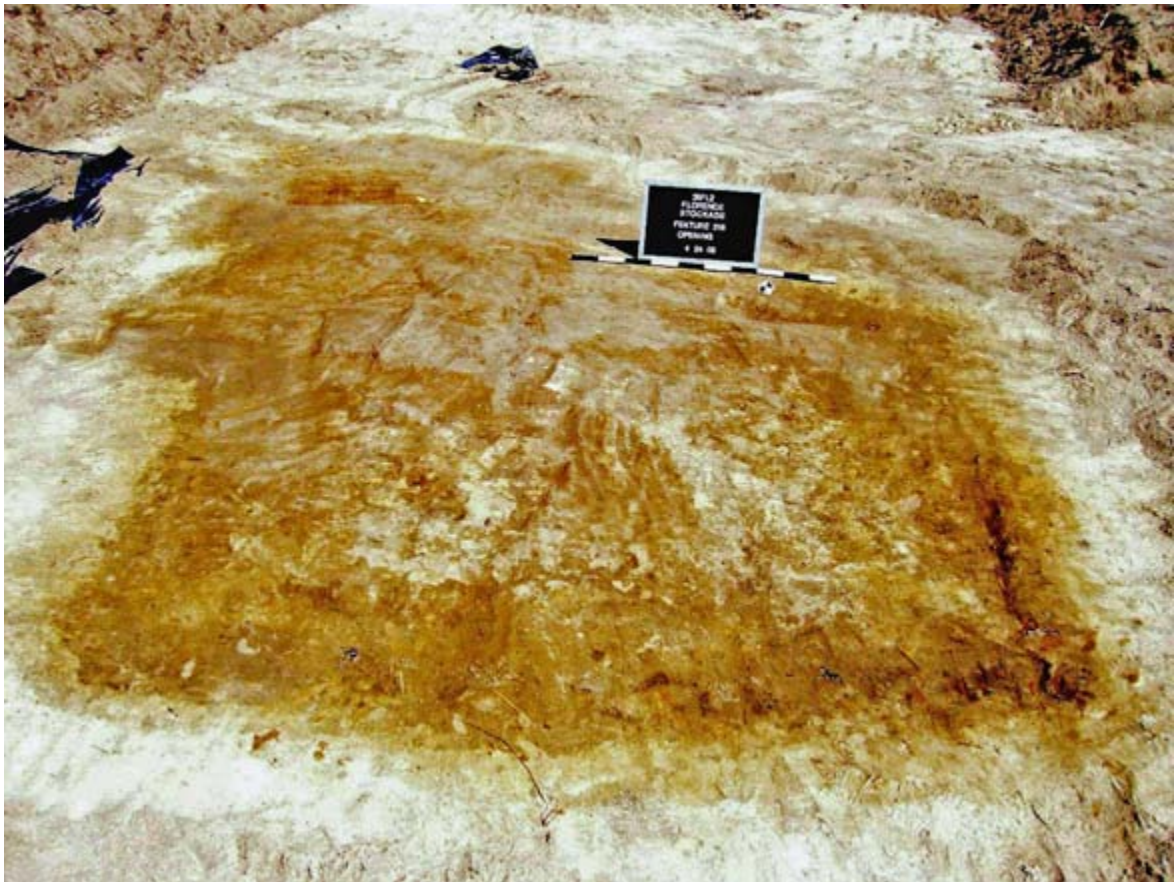


Figure 21. Plan view of Feature 216.

The hearth was excavated separately and was marked by a scatter of burned sandy clay, calcined bone and charcoal. A scatter of these materials extended into the interior of the hut, covering much of the northern half of the feature. The hearth is irregular in shape, with more of a triangular plan than Feature 212.

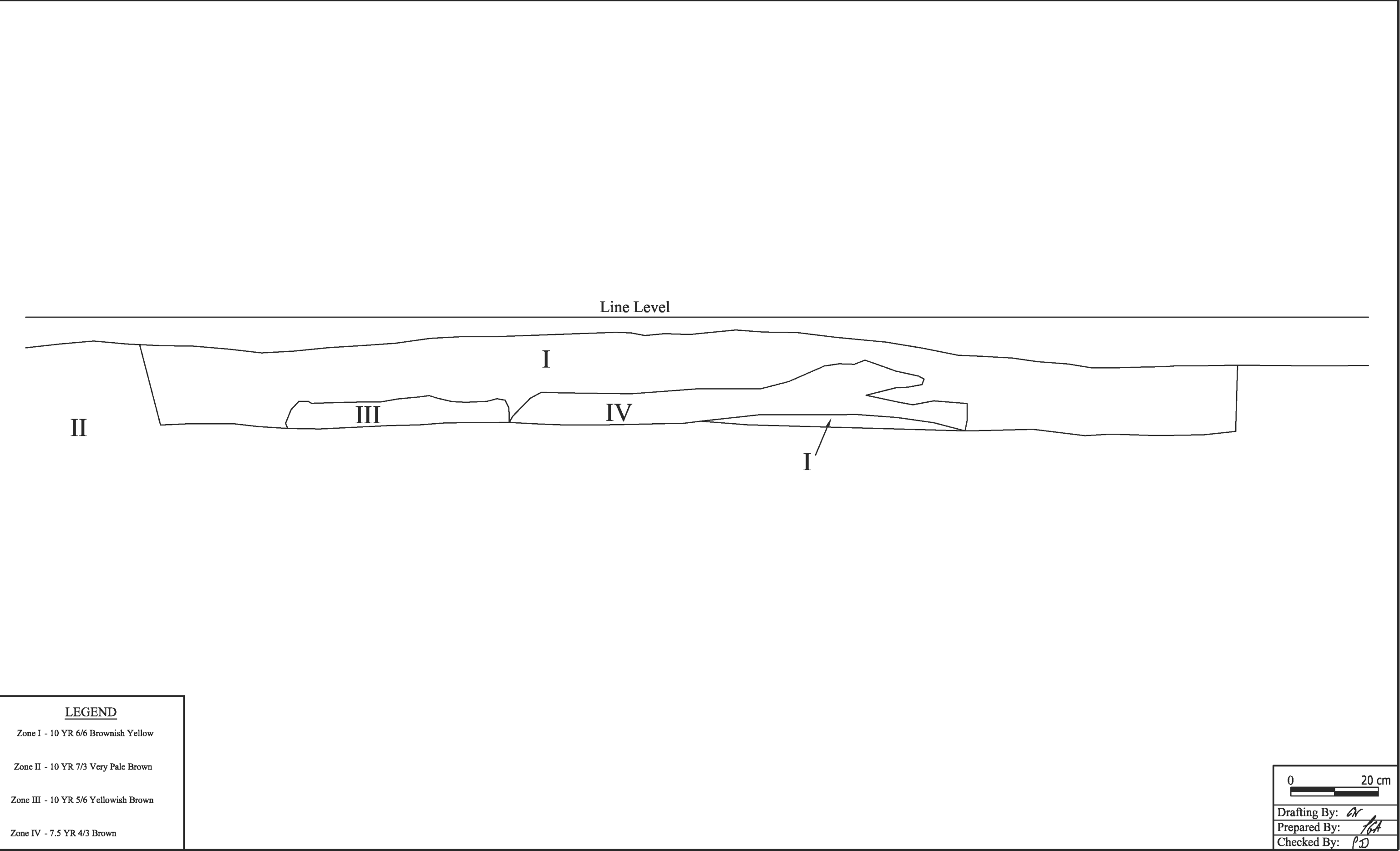


Figure 22. Feature 216, north profile.

Feature 221

Feature 221 was a large, rectangular feature located west of and adjacent to Feature 216 (Figure 23). The feature measured approximately 327 cm east/west by 225 cm north/south. A scatter of charcoal was noted near the center of the feature, which was heavily disturbed by large tree roots. The northeastern corner of the feature was particularly disturbed, with little remaining of the northern edge of the feature in this corner. The hut likely measured approximately 10 feet by 8 feet, covering 80 square feet.

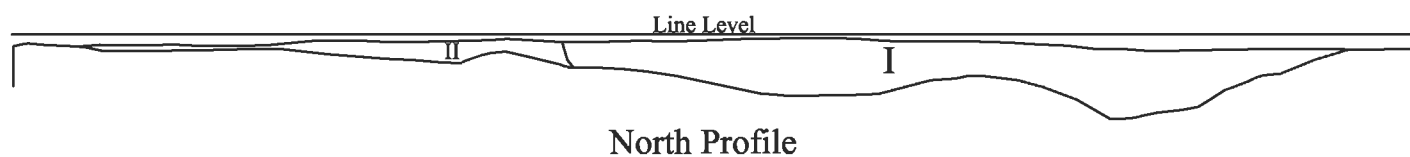
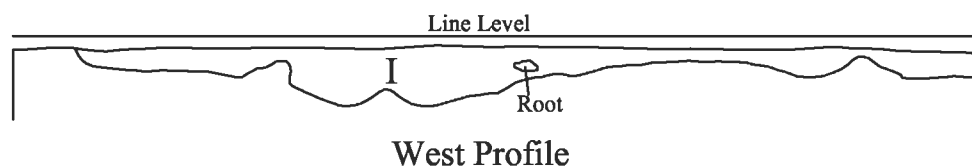


Figure 23. Plan view of Feature 221.

The feature was excavated in quadrants in order to allow the complete profiles of both the north/south and east/west axes to be recorded (Figure 24). The fill extended only as much as 12 cm below the truncated ground surface, and only achieves this depth in an area disturbed by roots. No evidence of a hearth or stove location was noted, although either may have been destroyed by bioturbation.

Feature 223

Feature 223 was similar to Features 212 and 216 in form, but was significantly larger, measuring 347 cm north/south by 306 cm east/west (Figure 25). The hut likely measured 10 feet by 10 feet covering 100 square feet. It was located south of the other huts, but still within the northwestern quadrant of the project area. A distinctive hearth was visible on



LEGEND

Zone I - 10 YR 4/3 Brown

Zone II - 10 YR 5/4 Yellowish Brown mottled with
10 YR 4/3 Brown

0 30 cm

Drafting By: *AN*

Prepared By: *PA*

Checked By: *PD*

Figure 24. Feature 221, west and north profiles.

the surface and proved to be in excellent condition. The hut was disturbed by a tree on the southeast corner and more significantly, by a modern waterline which traverses the entire feature from north to south east of the centerline. The trench for the waterline cut through the eastern side of the hearth, but did minimal damage. While the tree on the southeast corner may have caused this edge to collapse, it appears that the entryway may have been in this corner as well.



Figure 25. Plan view of Feature 223.

The feature was excavated in quadrants in order to allow the complete profiles of both the north/south and east/west axes to be recorded (Figure 26). The feature fill was very complex and extended to as much as 38 cm below the truncated ground surface. The complexity of the fill may indicate that it was filled in different episodes over a period of time. Wood and bricks were noted on the base of the feature, which likely represent building materials used in the hut. As discussed above, it was common for the walls of this type of hut to be clad in boards if they were available (Whitehorne 2006). The presence of what appeared to be burned pine bark may indicate that split logs were used for this purpose in this hut. These materials appeared to have been burned, which may indicate that the structure was intentionally destroyed after abandonment of the camp.

The packed clay hearth was in excellent condition and provided an unexpected opportunity to study the type. One wall of the hearth was bisected in order to examine the method of construction. The hearth was set into a rectangular excavation by packing the local red clay into the form to create the walls of the firebox (Figure 27). The floor was also formed of packed clay. The fill within the hearth was excavated separately and produced a great deal of material. After removal of this fill, the floor of the firebox was clearly visible. A scorched oblong area marked the actual area where the fire was maintained.

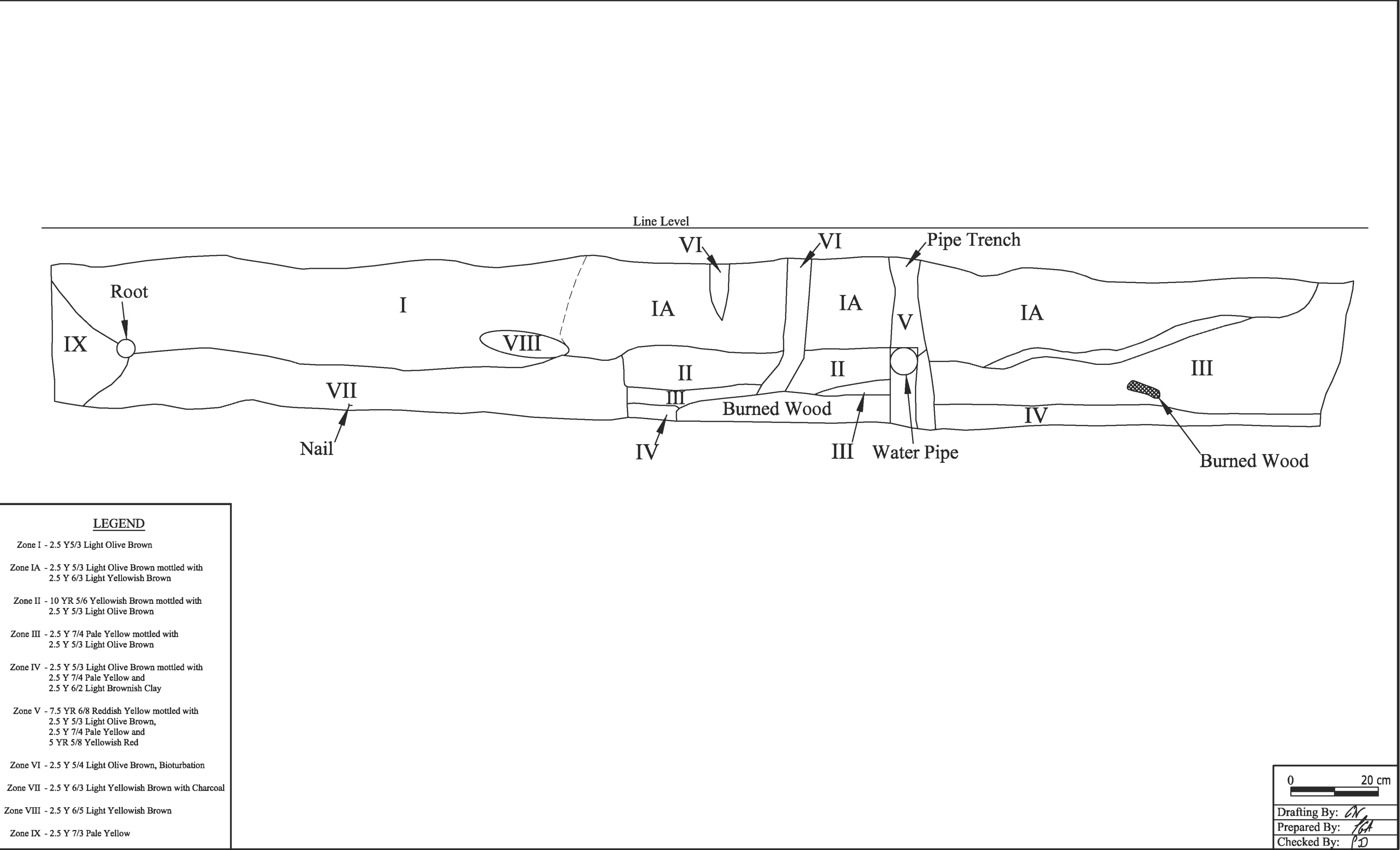


Figure 26. Feature 223, north profile.



Figure 27. Detail of excavated hearth, Feature 223.

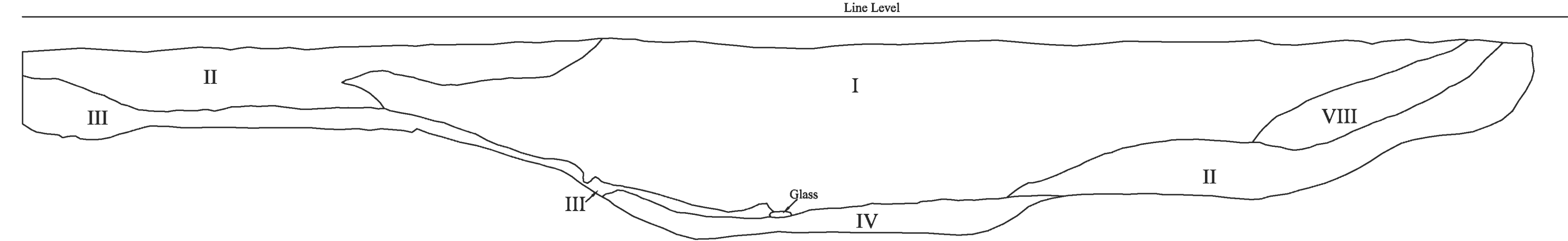
Feature 540

Feature 540 was located near the northwestern corner of the project area and was the largest structure recorded (Figure 28). The feature measured 432 cm north/south by 314 cm east/west, which indicates that the walls of the structure were approximately 14.5-15 feet by 10 feet. No obvious hearth was noted on the surface of the feature.

This apparent structure was excavated in quadrants in order to allow the complete profiles of both the north/south and east/west axes to be recorded (Figures 29 and 30). The fill was lighter in color and more mottled than that seen in the other structures, although a thin dark layer was noted just above the floor. The majority of the artifacts were recovered from this layer. The excavation for this structure extended to the harder, sandy clay subsoil, approximately 15-25 cm below the truncated ground surface. It appears that the feature may have remained open for some time after it was abandoned and was at least partially filled by natural processes.



Figure 28. Plan view of Feature 540.



LEGEND

- Zone I - 2.5 YR 6/4 Light Yellowish Brown mottled with 2.5 YR 4/3 Olive Brown and Charcoal
- Zone II - 2.5 YR 5/3 Light Olive Brown mottled with 10 YR 6/8 Brownish Yellow
- Zone III - 2.5 YR 4/3 Olive Brown with Charcoal
- Zone IV - 2.5 YR 5/4 Light Olive Brown
- Zone VIII - 10 YR 6/8 Brownish Yellow


0  30 cm	
Drafting By:	<i>AN</i>
Prepared By:	<i>PA</i>
Checked By:	<i>PD</i>

Figure 29. Feature 540, west profile.

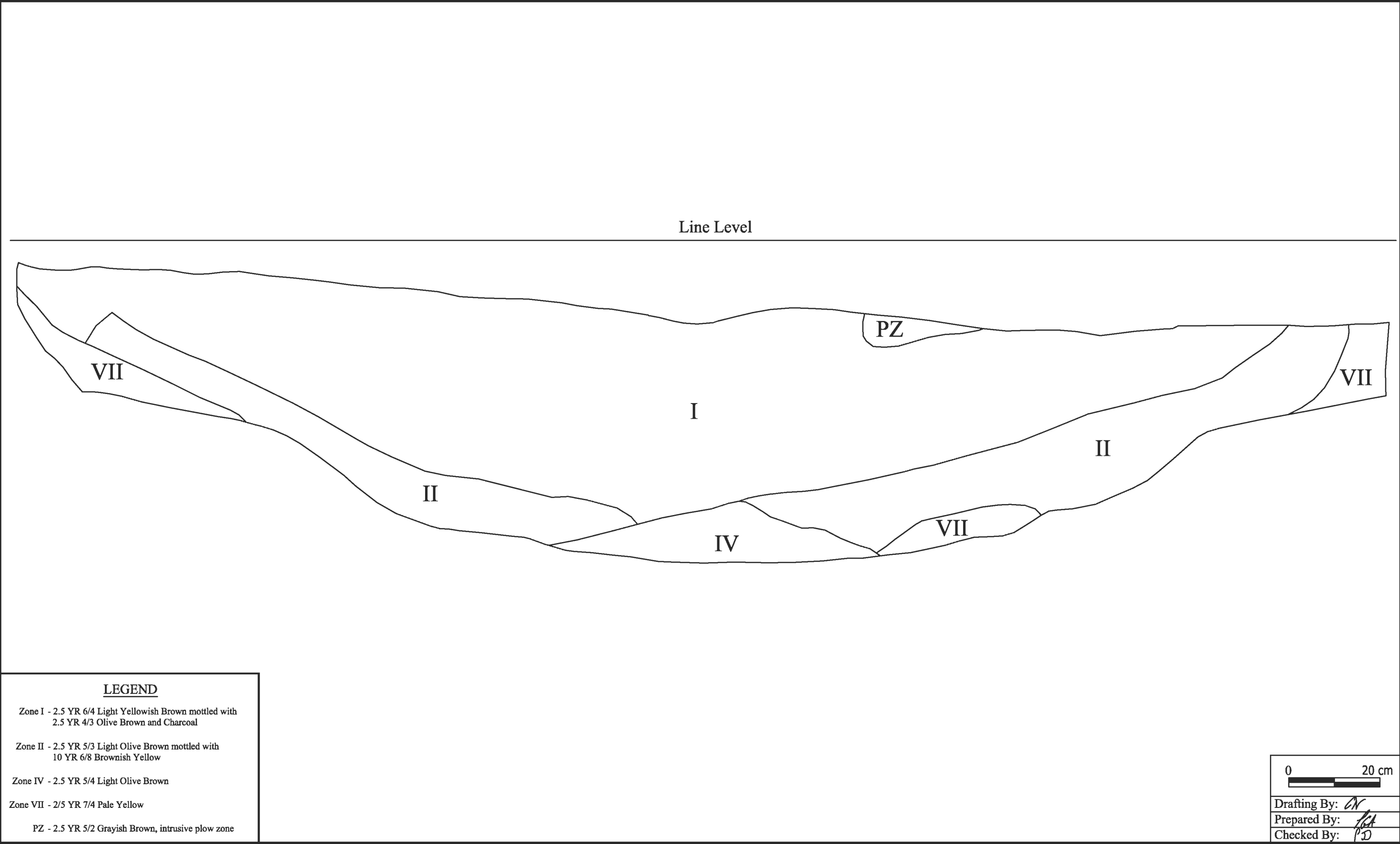


Figure 30. Feature 540, north profile.

Upon excavation, a relatively deep pit was located in the center of the structure. Extending as deep as 65 cm below the truncated ground surface, this pit may have been used as a small storage area. This likely indicates that a board or split log floor was used in this particular structure. An area of burned sandy clay in the northwest corner of the structure may mark the location of a stove. A number of small, possibly burned artifacts and bone fragments was also noted in this area. While this feature likely represents a substantial structure constructed in a similar manner to those discussed above, it is doubtful that its primary function was as a dwelling based on its size, orientation and location. As discussed below, this structure may have served as a guard house.

Trenches

Features that were significantly longer than they were wide, shallow in depth and generally linear were interpreted as trenches. Trenches served a wide variety of functions, but on the subject site, seem to be related to directing drainage and possibly as tent stands. In particular, three of those excavated may mark the locations of Sibley tents (Figure 31).

Sibley tents were conical in shape with round bases measuring approximately 18 feet in diameter. They were used with a sheet iron stove, called a Sibley stove, and were equipped with a chimney and a special vent that allowed smoke to escape through the peak of the tent. Sibley tents were capable of sheltering over 12 men, but were very heavy and expensive. Although not widely used after 1863, they continued to be issued to rear echelon units for the duration of the war (Nelson 2006, Whitehorne 2006). Sibley tents were often placed on a short wall of split logs or “stockaded” (Nelson 2006:183) to increase the space available inside. These walls were built by digging a trench, then placing the logs vertically in the trench and back-filling around them.

Directing rain water away from the shelters was another likely function for some of the trenches. The semi-subterranean huts were particularly prone to flooding unless ditches were used to direct water away from them (Whitehorne 2006). With the nearly-level terrain of the campsite at Florence, ditches were undoubtedly necessary to prevent water from gathering within the camp.

Three of the excavated trenches, Features 246, 372D and 449, may represent the remnants of wall trenches for Sibley tents (Figures 32 and 33). Each feature was curved, narrow and included a wider protrusion from the main portion of the trench. They were excavated in sections to allow for multiple profiles to be recorded (Figure 34). All were shallow, with the deepest being Feature 372D, which extended to 17 cm below the truncated ground surface. No post holes, molds or impressions were noted within the trenches, which indicated that the posts were removed.

While none of the trenches formed a complete circle, enough was recorded to allow for an estimate of the diameter if they had been complete. Using AutoCAD, a circle measuring 18 feet in diameter (that of the Sibley tent) was superimposed on the mapped feature. This test showed that each would have been the correct size to have accommodated a Sibley.

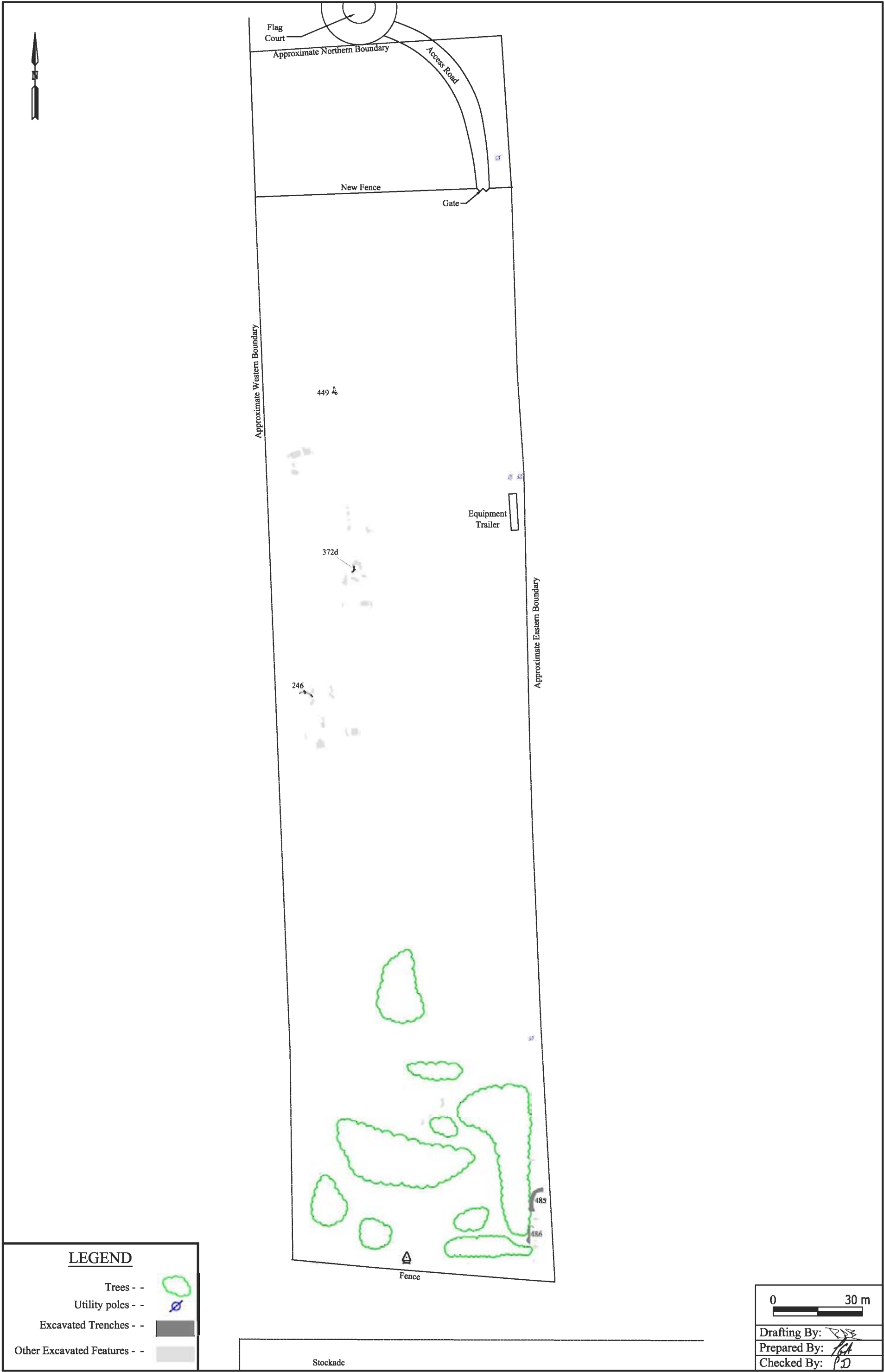


Figure 31. Excavated trenches.



Figure 32. Plan view of Feature 246.

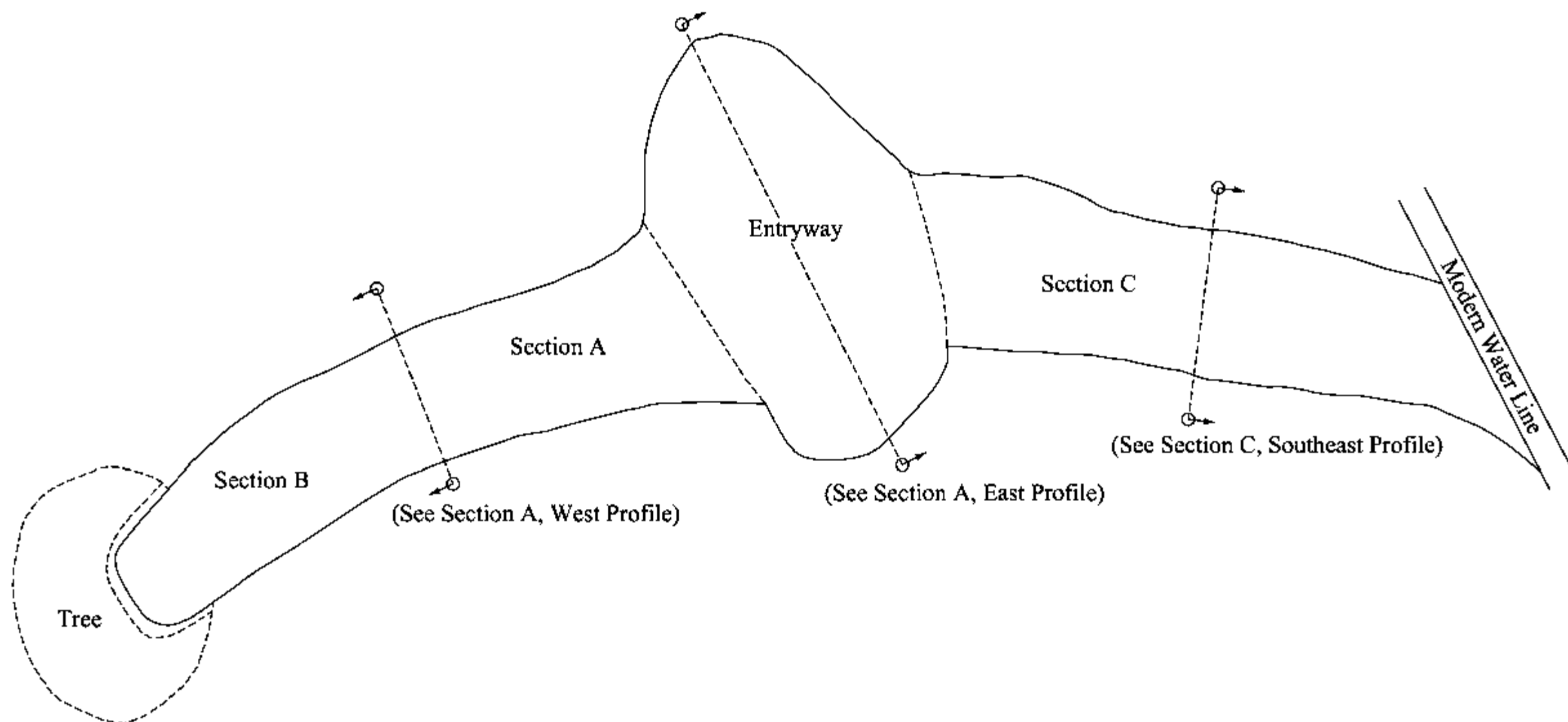
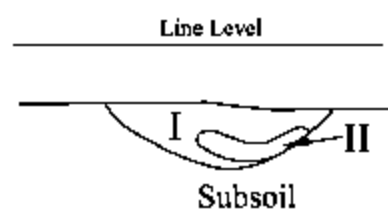
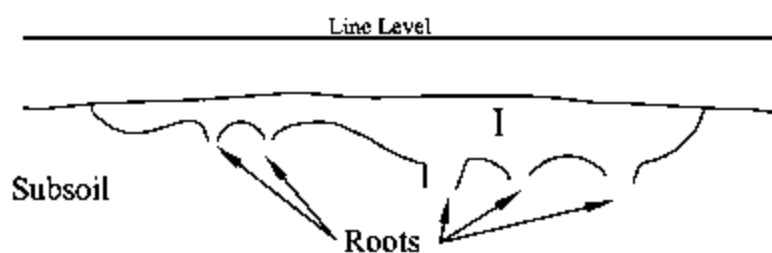


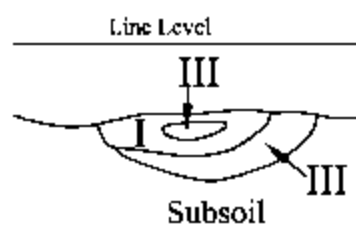
Figure 33. Feature 246, plan view showing bisection lines.



Section A, West Profile



Section A, East Profile



Section C, Southwest Profile

LEGEND

Zone I - 10 YR 4/3 Brown

Zone II - 10 YR 2/2 Very Dark Brown

Zone III - 10 YR 6/4 Light Yellowish Brown

Subsoil - 2.5 YR 7/4 Pale Yellow

0	30 cm
Drafting By:	EN
Prepared By:	TH
Checked By:	PD

Figure 34. Feature 246, sectional profiles.

The other features that overlap the assumed boundary of the tent likely post-date its abandonment.

The protrusions recorded as part of these trenches may mark the location of an entry way into each tent. This is problematic in that period photographs show stockaded Sibleys with larger doorways. This portion of Feature 246 also exhibited bioturbation, most likely from tree roots. It may be that these shallow depressions were added to increase the head-room of the entry. The position of outside features that extend to within the boundaries of where the tent would have stood is also an issue. The most likely interpretation is that the various pits and other features were excavated and in use after the Sibley tents were either moved or replaced.

The two other trenches that were excavated, Features 485 and 486, were located in the southeast corner of the site. Feature 485 (Figures 35a-c) was a wide, long trench extending in a north/south direction before turning approximately 90 degrees to the east and running into the eastern boundary of excavation. Excavation of the feature revealed it to be generally very shallow although it extended as deep as 25 cm below the truncated ground surface in one area. The function of this feature is not known. Feature 486 (Figures 36 and 37) was located south of Feature 485 and was found to be a narrow ditch with a rectangular profile. The ditch was oriented east/west on line with Feature 485. The feature spread into a wide, shallow area with diffuse borders on its southern end. As with Feature 486, its function is not known.



Figure 35a. Plan view of Feature 485, south end.



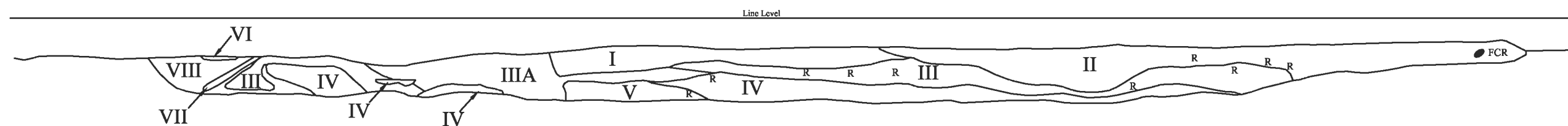
Figure 35b. Plan view of Feature 485, center.



Figure 35c. Plan view of Feature 485, north end.



Figure 36. Plan view of Feature 486.



LEGEND

- Zone I - 10 YR 5/4 Yellowish Brown
- Zone II - 10 YR 4/4 Dark Yellowish Brown
- Zone III - 10 YR 3/4 Dark Yellowish Brown
- Zone IIIA - 10 YR 3/4 Dark Yellowish Brown mottled with
10 YR 4/4 Dark Yellowish Brown
- Zone IV - 10 YR 6/6 Brownish Yellow layered with
10 YR 3/4 Dark Yellowish Brown
- Zone V - 10 YR 4/4 Dark Yellowish Brown heavily mottled with
10 YR 3/4 Dark Yellowish Brown
- Zone VI - 10 YR 2/1 Black, Organic Lense with Roots and Burned Wood
- Zone VII - 5 YR 4/4 Reddish Brown
- Zone VIII - 10 YR4/4 Dark Yellowish Brown mottled with
10 YR 6/6 Brownish Yellow and
10 YR 6/4 Light Yellowish Brown
- R - Root

0 50 cm

Drafting By: *ON*

Prepared By: *PA*

Checked By: *PD*

Figure 37. Feature 486, north profile.

Privies and Slit Trenches

By the beginning of the Civil War, it was known that the overall health of troops in camp was improved by maintaining the cleanliness of the camp. As early as 1779, U.S. Army regulations called for the “sinks” or latrines to be placed 300 paces in front of and to the rear of the camp (Von Steuben 1779 in Whitehorne 2006). The U.S. *Revised Regulations* of 1861 as well as the 1863 *Regulations for the Army of the Confederate States* also dictated that the sinks be placed a specified distance from the camp. By the point that these regulations were in place, the distance had been reduced to 150 paces in front of the camp for the men and 100 paces to the rear for the officers. While the regulations specified that the sinks were to be “concealed by bushes” and that “a portion of the earth dug out for sinks (was to be) thrown back occasionally” (USWD 1861:76), no other guidance on their construction was provided.

Sixteen features were identified at the Florence Stockade which were interpreted to function as latrines. These features took two basic forms, either privies (Figure 38) or slit trenches (Figure 39). Civilian privies of the time were generally large, square or rectangular in plan, possibly lined with wood or brick and covered by a small structure. While the military correlates encountered at Florence were not so elaborate, they resemble the civilian version in that more time was apparently spent on their construction. Each was excavated well into the hard, red clay subsoil, which allowed sufficient depth for extended use with regular covering of the waste with soil.

Feature 535 was the most formal of the privies (Figure 40). It was located southeast of Feature 540 and northeast of Features 212, 216 and 221, all structures. The feature was oval in plan at the surface and measured 137 cm east/west by 95cm north/south. The feature was bisected, with the north half removed first (Figure 41). Two soil zones were excavated, with the upper zone consisting of a light, silty sand mottled with yellow sandy clay and charcoal. The zone beneath the first consisted of a much darker, mottled silty sand that extended to the clay subsoil. The artifacts were concentrated in the darker soil zone and included primarily nails and metal fragments, but part of a bugle-shaped infantry hat device was also recovered.

Excavation of the south half of Feature 535 revealed a dark, rectangular stain within the oblong area of the pit. The soil within this stain was excavated first. Darker staining was noted around the edges of the rectangular area and several cut nails were recovered from the edges. This pit ended at a layer of light and dark soil mottled together with a concentration of organic material near its center. This zone extended under the presumed walls of the rectangular pit, so the remaining light, mottled sand was removed. The dark layer ended at the hard, red clay subsoil.

Based on the obvious rectangular stain and the presence of possible wood stains and nails around the edge of the stain, it is likely that Feature 535 was a privy lined with a wooden box or crate. It appears the oblong pit was excavated and possibly used as a privy before

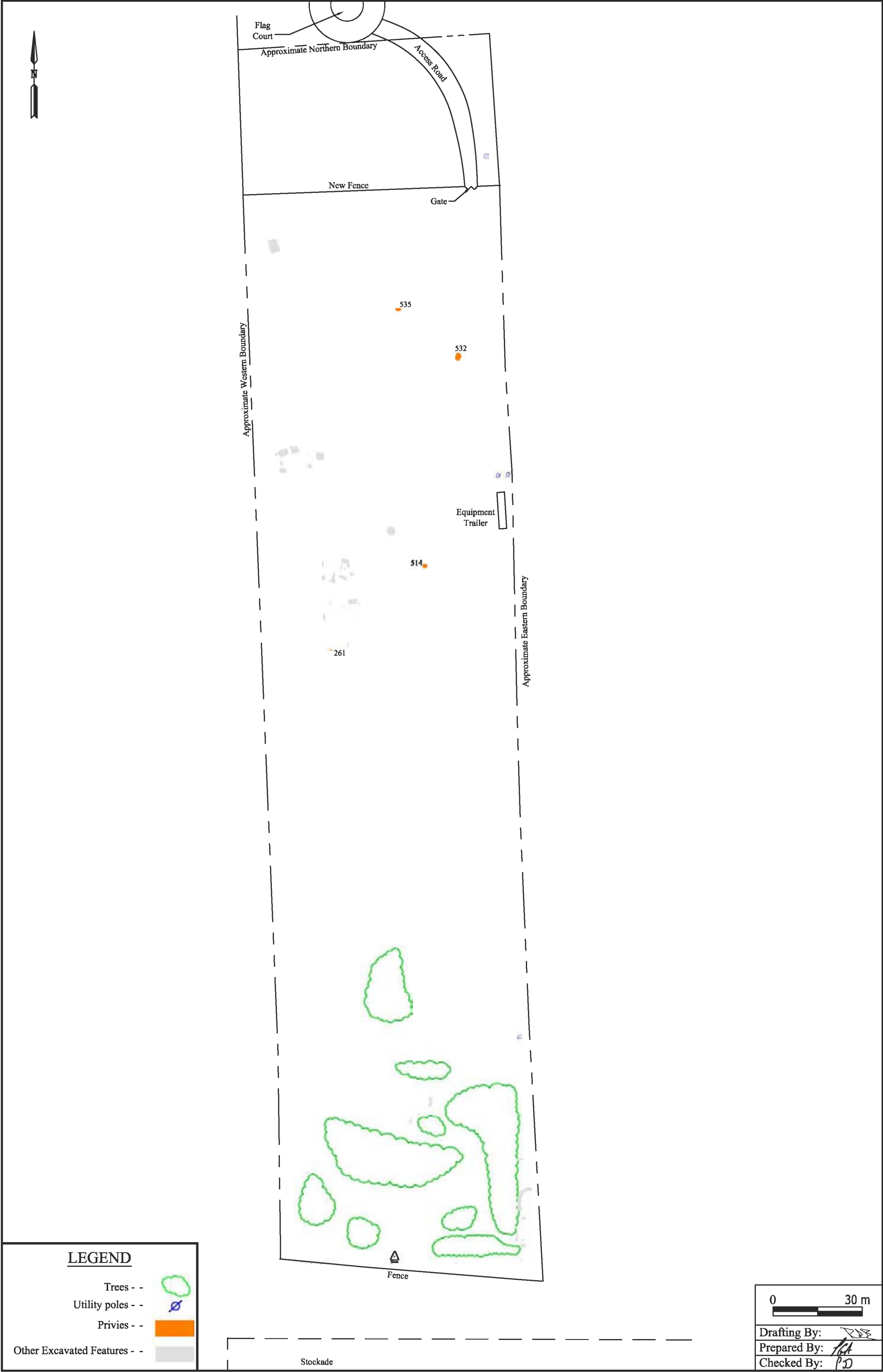


Figure 38. Excavated privies.

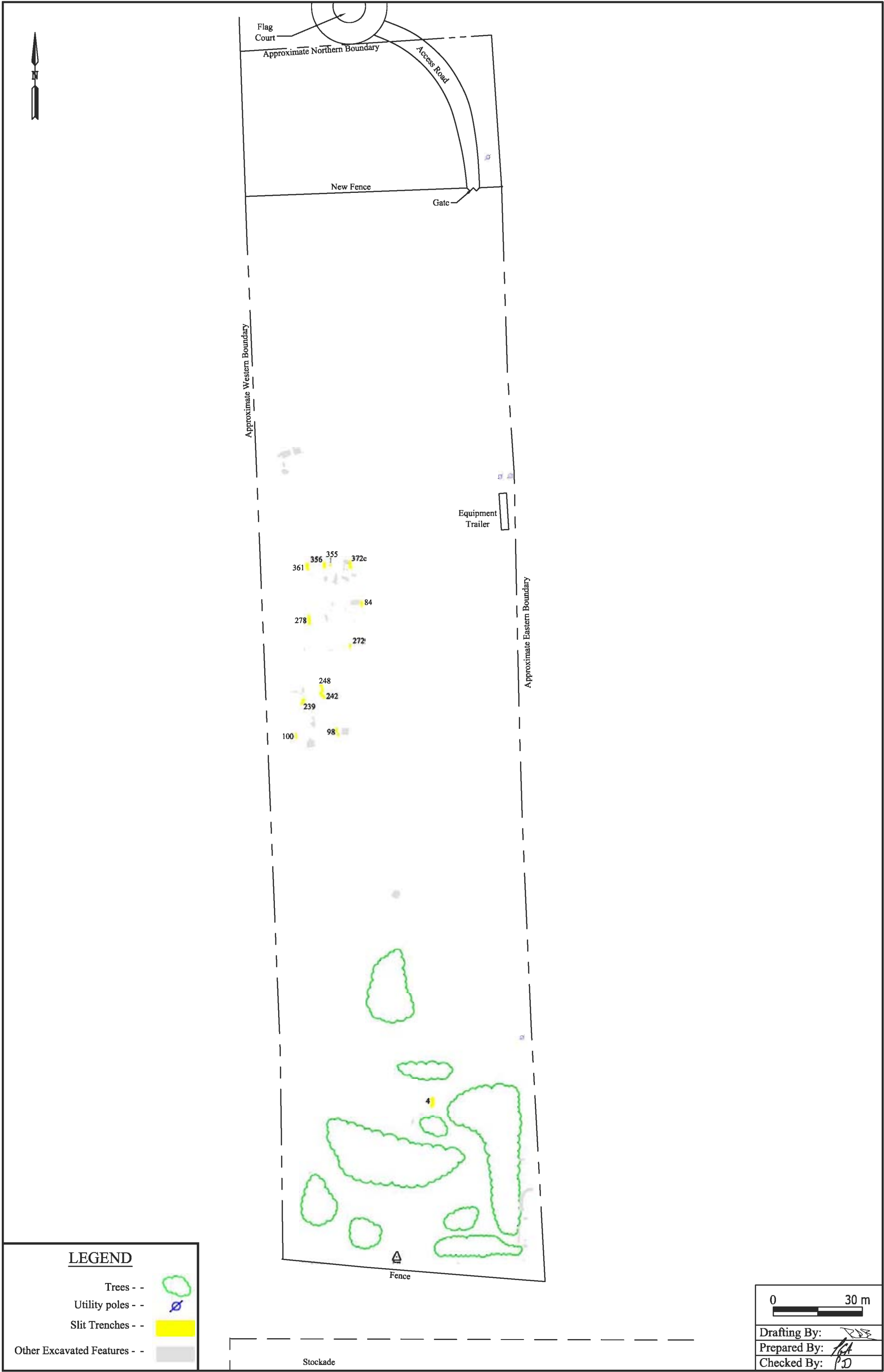


Figure 39. Excavated slit trenches.



Figure 40. Plan view of Feature 535.

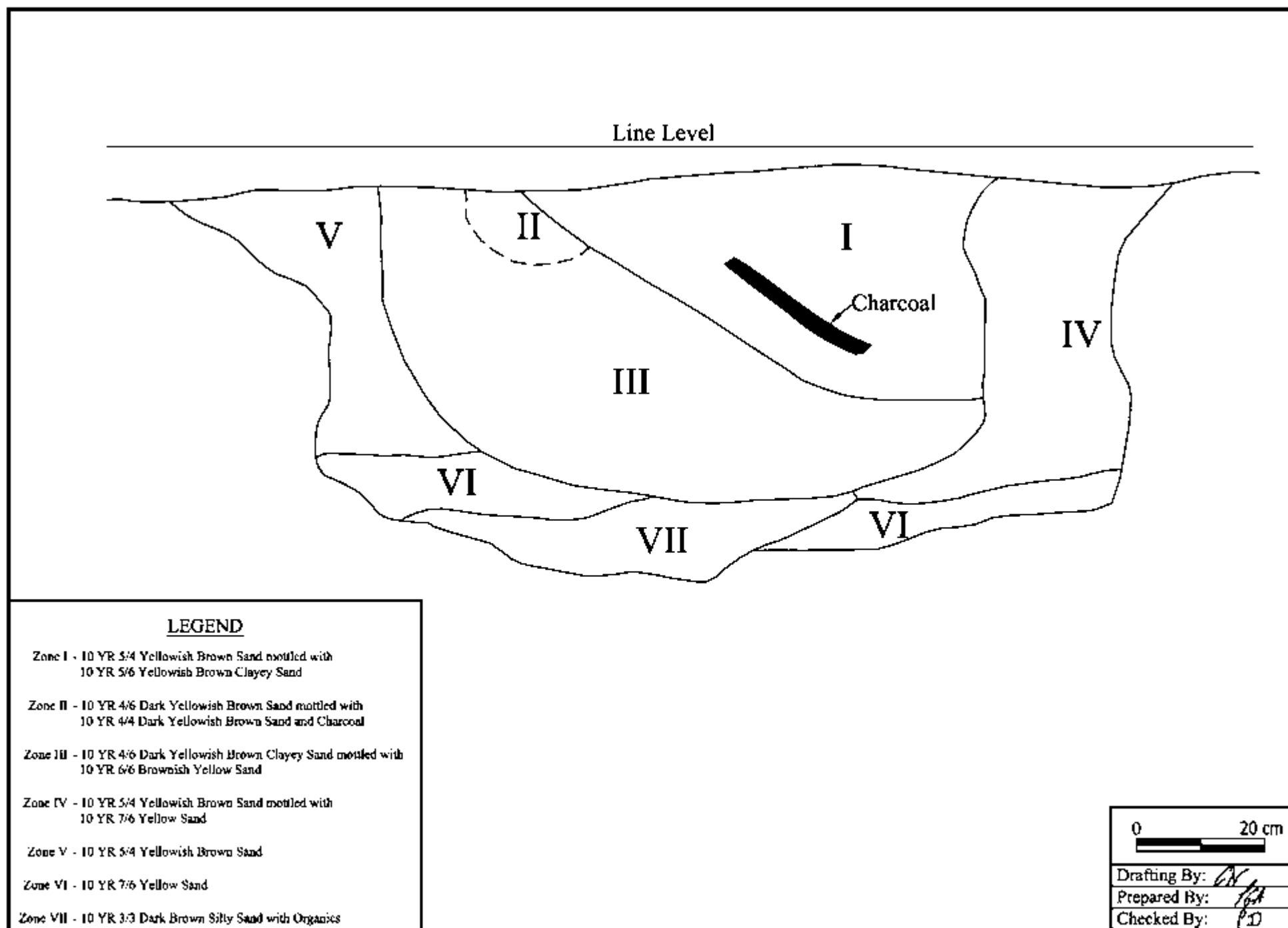


Figure 41. Feature 535, south profile.

the liner was inserted. After the box was placed in the pit, the edges were filled in with sand. No evidence of a structure above the vault was noted. While no obvious layers of night-soil were encountered, this may indicate that clean soil was regularly used to cover the waste, causing the two to mix.

Feature 532 was located southeast of Feature 535 and was larger but less formal (Figure 42). The feature was basically oval in shape with irregular protrusions caused by tree growth or plowing. It measured 225 cm east/west by 180 cm north/south. The feature was bisected with the eastern half removed first (Figure 43). Excavation revealed a thick layer of mottled silty sand which overlay a very dark, organic layer, which appeared to be night-soil. This zone was concentrated in the northern end of the feature. Beneath the night-soil was a layer of sandy clay mottled with areas of burned clay and charcoal, which covered another layer of night-soil. This layer of night-soil lay on top of a layer of coarse sand, which rested on the hard, red clay subsoil. After excavation, the feature was found to have an hour-glass shape and to be deeper in the north end than the south. It appears that the pit was dug in two episodes, with one lobe encroaching on the other. The night-soil deposits are thicker on the north end, which may indicate that the north end was more heavily utilized.



Figure 42. Plan view of Feature 532.

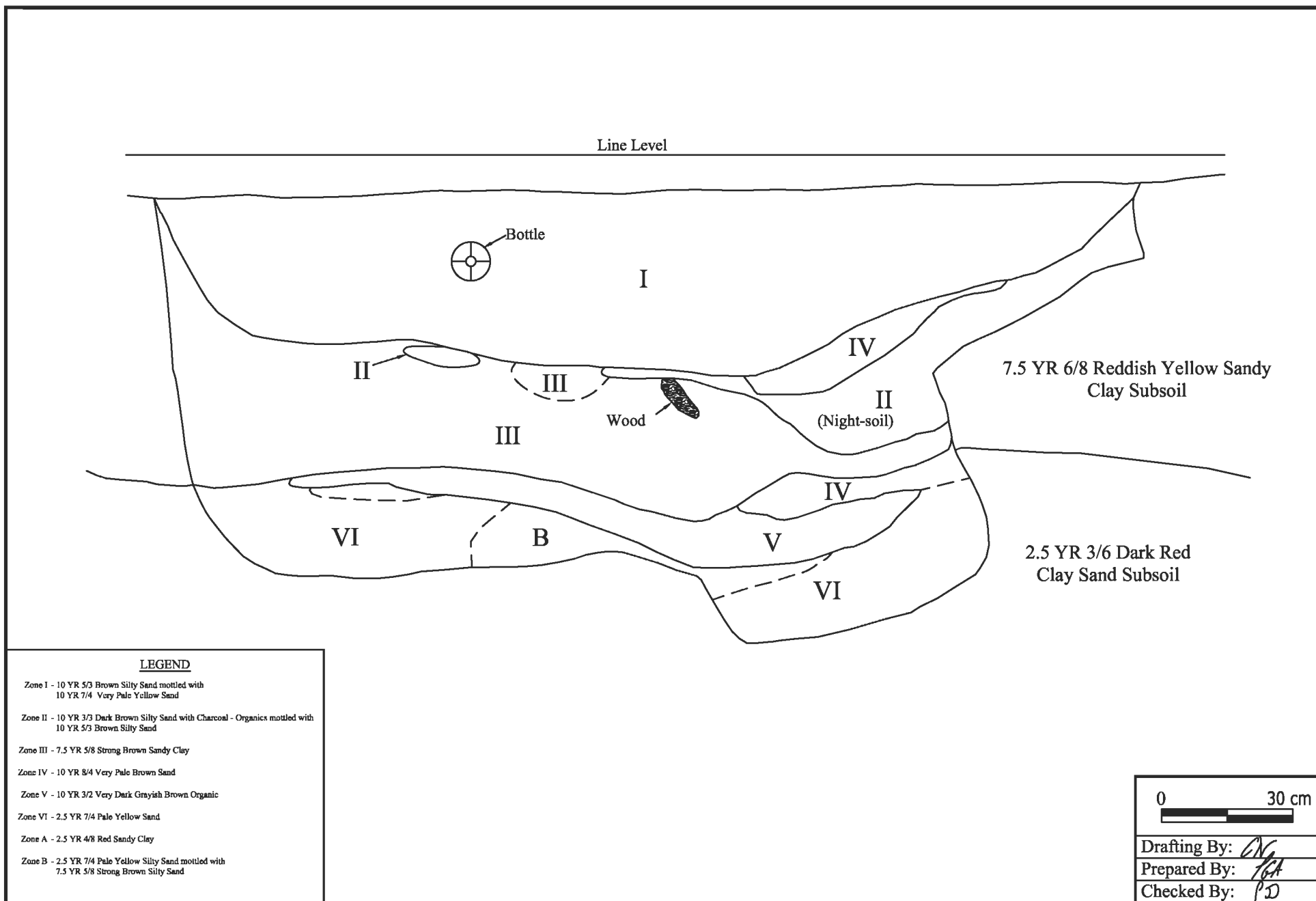


Figure 43. Feature 532, west profile.

Artifacts were recovered from all zones, but larger fragments of domestic debris, including olive glass bottles and stoneware sherds were located in the zones above and between the night-soil layers. Bone fragments, nails and smaller fragments of container glass were recovered from the night-soil layers. It is possible that the larger materials were dumped in the privy when it was being capped between use episodes, while only smaller items were dumped during its use.

Feature 261 has also been interpreted as a privy, but is much smaller than the other two (Figure 44). The feature was located east of Feature 93 (a structure) and measured 92 cm southeast/northwest by 49 cm southwest/northeast. The surface of the feature was oblong in plan, with an oval of charcoal visible in the center. The feature was bisected with the northwest half removed first (Figure 45). Three soil zones were encountered, including a layer of light silty sand (Zone I) over a relatively thick night-soil (Zone II) over a very light silty sand (Zone III), which lay directly on the red clay subsoil. The pit was found to be oval in plan at the base and basin-shaped in profile. A large quantity of animal bone was recovered from all zones, while one rifle shot and the fragments of a percussion cap were recovered from Zone I. Two handmade brick fragments were also recovered. The relatively thick layer of night-soil likely indicates that this privy was used for an extended period or was used extensively before being filled. However, its small size would suggest that it was not used by a large portion of the camp.

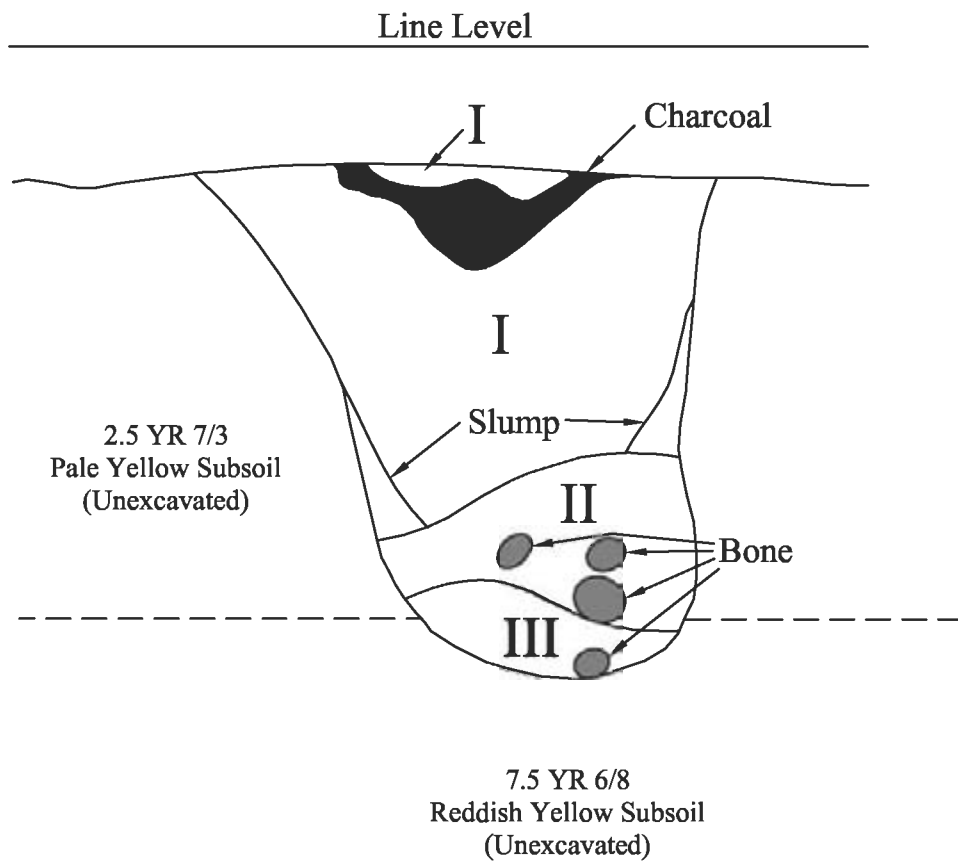
Feature 514 has also been interpreted as a possible privy (Figure 46). The feature was located south of Feature 532 and northeast of Feature 85. It was a rounded square shape and measured 157 cm east/west by 132 cm north/south. The feature was bisected on an east/west line with the south half removed first (Figure 47). The profile revealed a rough basin shape with the east end deeper than the west, similar to Feature 535. The fill consisted of a homogenous silty sand which overlay a zone of swirled light and dark soils indicative of water-borne deposits on the west end, while the east end consisted of a much darker mottled fill extending to the base of the feature that appeared to have been intentionally placed in the feature. Beneath the water borne deposits on the west end was a very dark, organic layer containing charcoal and burned bits of clay. The organic nature of this zone suggested that it was night-soil. This layer was capped by a very thin layer of clay which extended to the western wall of the pit. The organic zone lay on the same dark, mottled fill from the east side of the feature.

The artifacts recovered from Feature 514 were fewer in number and more fragmentary than those from the other privies. Much of the material was located within the uppermost portion of the fill (Zone I). This zone produced the tip of a bayonet blade, cut nails and brick fragments as well as faunal remains. The night-soil produced only brick fragments. The soil washed into the pit was sterile, while cut nails, brick fragments and a sherd from a clay tobacco pipe were the only materials recovered from Zones III and V.

The initial interpretation of Feature 514 was problematic. The similarities to Feature 514 in the size and shape to Feature 535, along with the presence of night-soil indicate that this feature was used as a privy. The location of the feature well east of the huts and generally in line with Features 532 and 535 contributes to this assumption. The presence of a



Figure 44. Plan view of Feature 261.



LEGEND

- Zone I - 10 YR 6/4 Light Yellowish Brown Silty Sand
- Zone II - 10 YR 5/3 Brown Silty Sand
- Zone III - 10 YR 7/3 Very Pale Brown Silty Sand

0 20 cm

Drafting By: *ON*
 Prepared By: *PA*
 Checked By: *PD*

Figure 45. Feature 261, southeast profile.



Figure 46. Plan view of Feature 514.

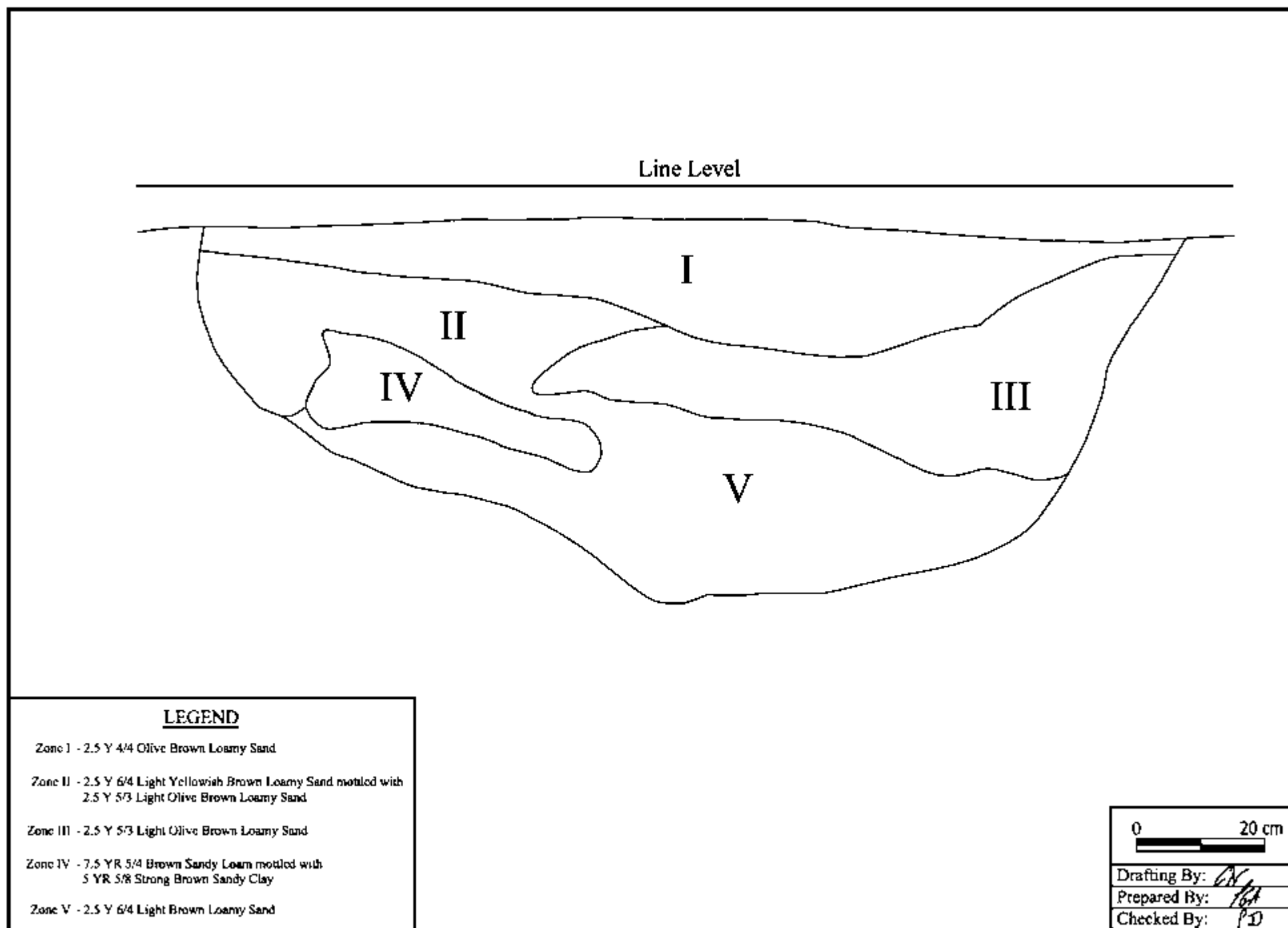


Figure 47. Feature 514, north profile.

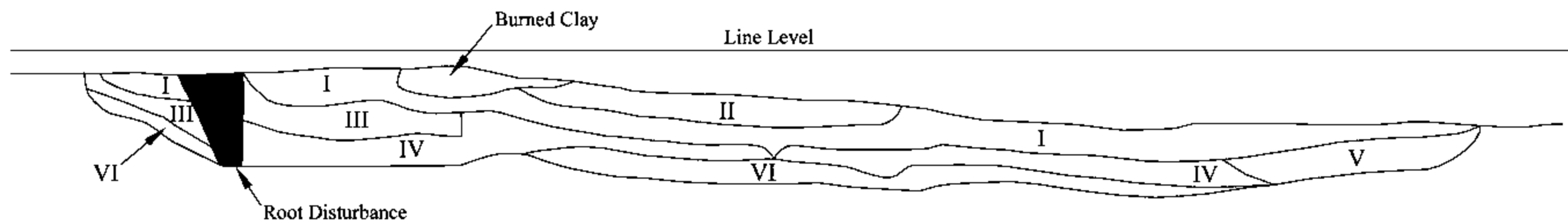
relatively high number of nails suggests that the privy was lined, but no staining associated with a wooden liner was noted. The small area of night-soil and the lack of more and larger artifacts suggests that the privy was not open or in use for a long period of time. However, water-borne fill demonstrates that at least the western portion was open for some time.

Slit trenches were a less formal means of maintaining camp hygiene, consisting of nothing more than a long, narrow trench. Those recorded at Florence generally conformed to this description, but the actual size and shape of each varied widely. Generally, a trench-like feature containing night-soil was interpreted to be a slit trench. In profile, they were typically shallow, but may have one or two deeper sections connected by a shallow area. Like privies, slit trenches were also used for the disposal of other camp refuse. Slit trenches were located across the project area, but were concentrated around the structures in the northwestern quadrant, an obvious departure from the standard regulations.

Feature 248 was a good example of the slit trench features from Florence (Figure 48). The feature was located southeast of Feature 93. In plan, the trench was long with a wider rounded lobe on each end and described a shallow arc. The trench measured approximately 250 cm north/south by 82 cm east/west. The feature was bisected on a north/south line with the west half removed first (Figure 49). The feature was deepest on its northern end, where it reached to approximately 20 cmbs. The fill consisted of a series of complex soils indicative of the intentional in-fill of the feature. The feature had been impacted by a large root on the northern end and several east/west running plow scars.



Figure 48. Plan view of Feature 248.



LEGEND

- Zone I - 10 YR 3/2 Very Dark Grayish Brown mottled with 10 YR 5/4 Yellowish Brown and Charcoal
- Zone II - 10 YR 7/4 Very Pale Brown mottled with 10 YR 3/4 Dark Yellowish Brown and 10 YR 5/4 Yellowish Brown
- Zone III - 10 YR 4/2 Dark Grayish Brown with some Charcoal
- Zone IV - 10 YR 7/3 Very Pale Brown with Ash
- Zone V - 10 YR 4/2 Dark Grayish Brown mottled with 10 YR 7/4 Very Pale Brown
- Zone VI - 10 YR 7/3 Very Pale Brown mottled with 7/5 YR 5/6 Strong Brown and Sandy Clay Nodules (Subsoil)

0 20 cm

Drafting By: *GN*
 Prepared By: *PA*
 Checked By: *PD*

Figure 49. Feature 248, east profile.

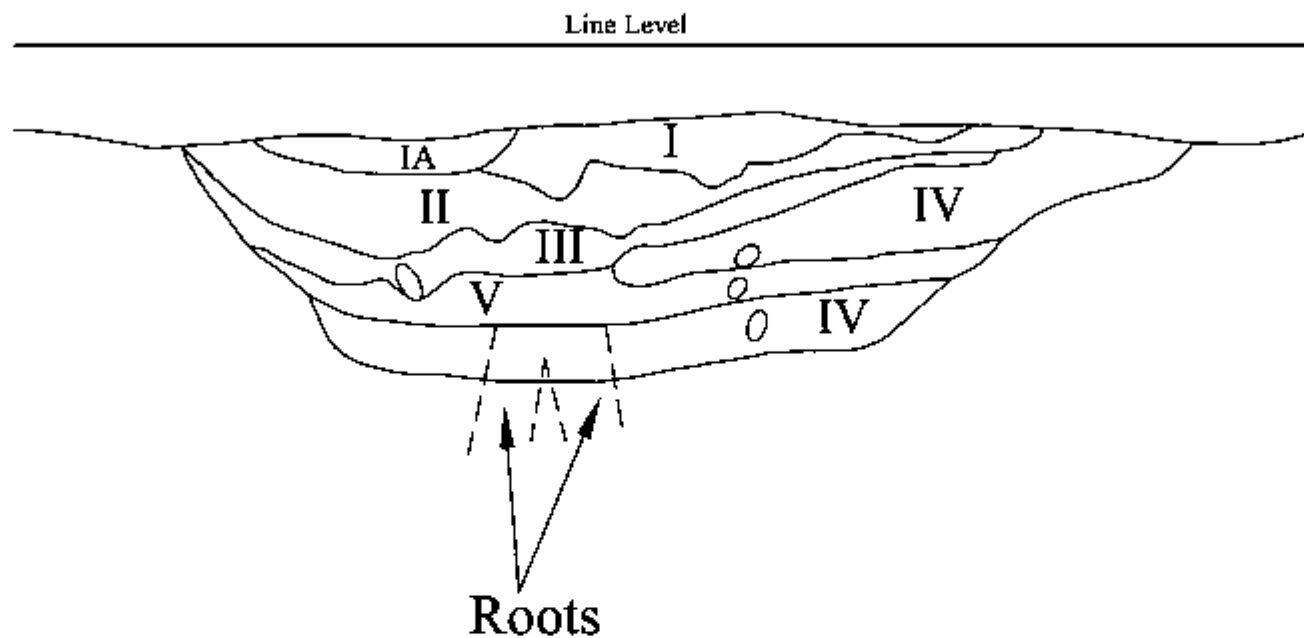
The majority of the surface of the feature was covered by a dark mottled silty sand containing scattered charcoal (Zone I). This zone underlay a small area of lighter mottled soil near the center of the feature (Zone II) and an area of burned clay just north of Zone II. A dark, organic layer containing some charcoal (Zone III) underlay Zone I in the northern end of the trench. This zone may be night-soil. Zone III was underlain by a light, ashy layer (Zone IV) that extended down the majority of the length of the trench. Zone IV rested directly on the base of the trench in the northern end, but was underlain by light mottled strata with small nodules of clay (Zone VI). This zone extended to near the southern end of the trench. Zone V, a dark mottled silty sand, lay on the base of the southern end of the feature and underlay Zone I in this area. Artifacts were very sparse and were not contained to a specific soil zone. Recovered materials included percussion caps, cut nails, a pewter spoon bowl and faunal remains.

Feature 242 (Figure 50) was a wider, more rectangular trench located adjacent to and south of Feature 248. Feature 242 measured approximately 182 cm northeast/southwest by 115 cm northwest/southeast. The feature had been impacted by tree growth on the southeast and southwest corners and multiple rodent burrows were noted during excavation. The feature was bisected on a northwest/southeast line, with the northwestern half removed first (Figure 51). The feature had a relatively flat base with complex fill to a depth of up to 31 cmbs.



Figure 50. Plan view of Feature 242.

The fill generally followed the shape of the trench's profile. The center of the trench was covered by a homogenous silty sand (Zone I). The bisection line cut through a small area of red silty clay (Zone IA) that coincided with a tree disturbance. Zones I and IA were underlain by a dark, organic layer of night-soil (Zone II), which overlay another, slightly darker layer of night soil, with some ashy inclusions (Zone III). Beneath Zone III, two layers of fill with light and dark lamellae of soil continued to the light, silty sand base of the trench. A large amount of artifacts and faunal remains were recovered from throughout the fill. Recovered materials included container glass fragments, cut nails, percussion caps, ammunition, buttons, a hard rubber ring and a possible wallet clasp. The large number of artifacts and the amount of water-borne fill in the base of the trench beneath the night soil indicate that Feature 242 was open for a long period of time before it was used.



LEGEND

Zone I - 10 YR 6/4 Light Yellowish Brown

Zone IA - 5 YR 5/8 Yellowish Red Silty Clay

Zone II - 5 YR 3/4 Dark Reddish Brown with Charcoal

Zone III - 10 YR 3/2 Very Dark Grayish Brown with Ash

Zone IV - 10 YR 7/4 Very Pale Brown with
10 YR 5/3 Brown in Laminar Band

Zone V - 10 YR 4/3 Brown

○ - Bone

0 20 cm

Drafting By: *AK*

Prepared By: *AK*

Checked By: *PD*

Figure 51. Feature 242, southeast profile.

Wells

Three wells were identified just east of the camp, almost on the centerline of the project area (Figure 52). On the surface, the three wells each presented as a large circular features. It was only after excavation began on the first of these features that their function was discerned. The digging of wells is not addressed by the regulations of either army (CSWD 1863, USWD 1861) and was not expected at the Florence site given the proximity of Pye Branch. One period account mentions the Confederate effort to dig wells, although it is unclear if it refers to those excavated here.

The water here is scarce, and not good; our men have commenced digging wells, but they have no spades, shovels or picks, so for the present they have stopped, at some six feet depth, without water. The Yankees are more expert-they have dug tunnels and wells after the fashion of moles, with their noses or claws...(Eccles 1864).

Feature 518 was the first of the wells excavated and was the furthest north (Figure 53). On the surface, the well was a very large oval feature measuring 282 cm northwest/southeast by 216 cm northeast/southwest. Excavation began by quartering the feature along the long and short axes and removing the eastern quarter. At that time, the function of the feature was unknown. As the excavation proceeded to approximately 45 cmbd, the slope of the outer wall of the feature became vertical. Excavation of the eastern quadrant was halted at approximately 127 cmbd and the southern quadrant removed. Removal of the southern quadrant to the same vertical level revealed the continued vertical edge of what was then obviously a square well shaft (Figure 54). The remaining northwestern half of the feature was then removed to the same level.

At this point, the strategy for excavating Feature 518 was modified. The excavation of deep features such as wells present many technical, methodological and safety challenges. Excavation becomes more difficult as depth increases and the physical space within the shaft decreases. Vertical control for recording the stratigraphy also becomes difficult as temporary datum points become necessary with the loss of visibility from the surface. The major concern, however, was for the safety of the crew members involved with excavating the feature. Basically, only two options exist for the safe removal of fill from a well. The first involves using a form of shoring to prevent the collapse of the walls of the well shaft. This approach is effective and has been used on many similar excavations in the past, but it is expensive and time-consuming. The second option is to step the area around the feature as excavation proceeds. This option removes any chance of the crew being trapped by a collapse of the walls, but requires heavy equipment and creates a hole of ever increasing proportions as depth increases.



Figure 52. Excavated wells.



Figure 53. Plan view of Feature 518.



Figure 54. Upper shaft of Feature 518.

It was decided to use heavy equipment to step the walls of the well shaft back as the fill was removed from the well shaft. With limits on schedule and budget, but ready access to heavy equipment, this was deemed to be the most practical approach. The remainder of the feature was bisected and the fill removed in sections measuring approximately one meter in depth. This approach proved successful until the fill remaining after the bisection began to pull away from the wall of the well. To prevent collapse, the vertical interval was reduced to 50 cm. After the first half of each bisection was removed, the profile was mapped and photographed, then the second half was removed. When the depth of the shaft had reached approximately one meter below surrounding ground surface, excavation was halted and the walls of the shaft stepped back. This procedure continued to the base of the well.

One of the major problems encountered during the excavation of Feature 518 was maintaining vertical control of the strata. Temporary vertical control points were shot in when necessary to allow for accurate mapping. Despite careful placement of the nails marking these points and covering the existing surface of the feature, the datums and a portion of the feature were lost during the mechanical expansion of the hole twice. The areas lost to these errors are marked on the profile drawing. New points were shot in after each incident so that an estimate of how much of the fill was lost could be made and to allow mapping to continue relative to the site elevation datum.

Excavation of Feature 518 revealed a square well shaft extending to a depth of approximately 6.7 meters (22.1 feet). The shaft was approximately four feet square at the surface but narrowed significantly with depth. The shaft was excavated through the light sandy subsoil, through an orange sandy clay below that, then through a very thick layer of extremely hard, red clay. Beneath the red clay, the shaft was dug through a softer, orange sandy clay mottled with bits of red and white clay. Near the base of the shaft, the walls were composed of a much softer yellowish sandy clay with a large amount of white clay mottled in it. The walls of the shaft had apparently slumped in this saturated zone as the shaft appeared larger in this area. The original well shaft ended at a layer of rock.

The red clay layer discussed above was so hard that the backhoe already on site could not excavate through it. A larger trackhoe had to be used to remove this soil. This clay served to preserve a relic of the construction of the well. Sockets cut into the walls of the shaft near the corners of opposing walls were likely used as supports for boards used by the well digger in getting into and out of the shaft (Figure 55). While no liner was encountered and no organic stains indicative of a wooden liner were noted, a concentration of nails near the walls of the shaft less than one meter above the base implies the use of a wooden liner.

The fill within the well shaft consisted of a series of darker and lighter zones, each comprised of small areas or bands of alternately darker and lighter soils (Figure 56). In some zones, individual lamellae were clearly visible. No homogenous soil zones were noted, although some were less mottled than others. One thin band of black, organic material was discovered approximately 240 cmbs, but no other differing layers were encountered. It is apparent that the fill was introduced to the well shaft by runoff from the surface.

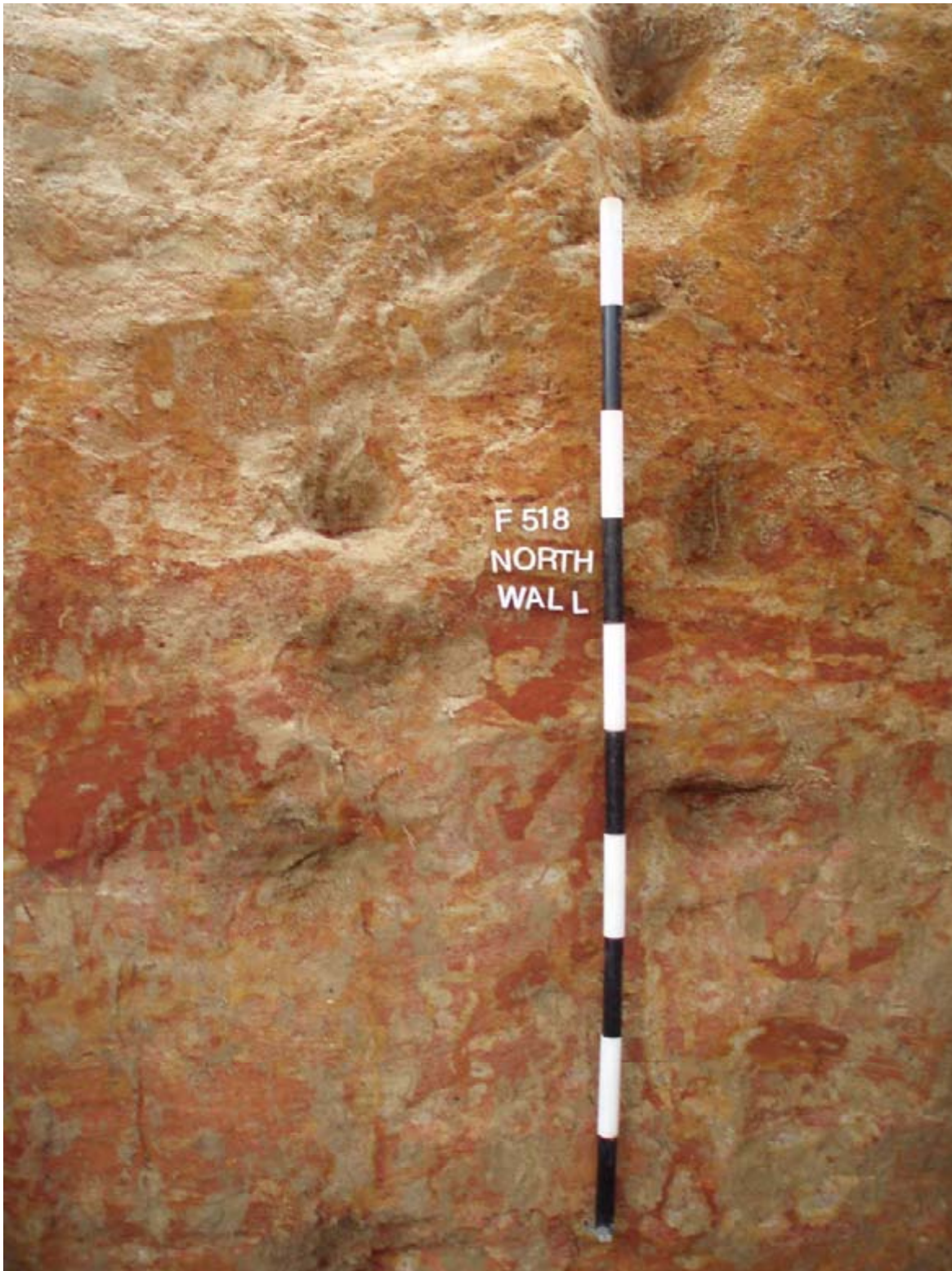
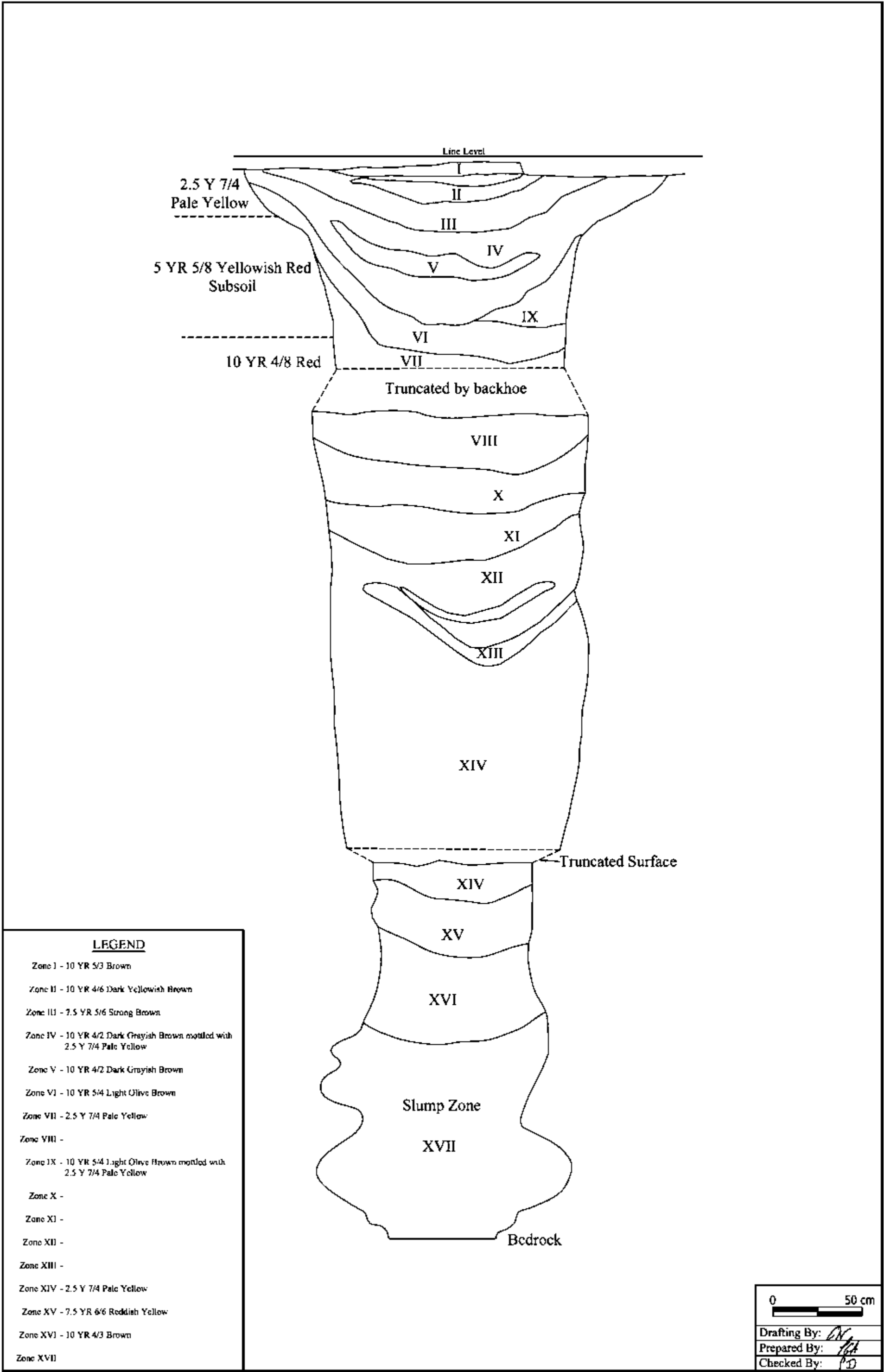


Figure 55. North wall of Feature 518 showing indentations for boards.



Artifacts were recovered from throughout the fill, with no obvious temporal separation from top to bottom. The most significant concentration of artifacts was located just above the base of the well, where two stoneware bottles, one olive glass bottle, several large ceramic sherds and two partial bayonets were recovered (Figure 57). Other artifacts included refined and utilitarian ceramics, container glass, brick fragments, cut nails, ammunition, other bayonet fragments, a broken shovel blade and even a ca. 1860-1864 penny.



Figure 57. Two of the bayonets recovered from Feature 518.

Based on the stratigraphy of the fill within the well, it is apparent that Feature 518 remained open for many years after the abandonment of the camp in spite of the lack of temporal space between the artifacts recovered. The slump of the walls near the base of the well likely filled this area relatively quickly. Extensive plowing on the surface around the well introduced Civil War period artifacts into the plow zone, which were then transported into the well shaft along with large amounts of soil by rain water. No sign of the well was visible before the area was stripped, so the upper portion removed with the plow zone may have been filled at some point. It is unclear why no later artifacts were recovered.

Feature 502, the next well south of Feature 518, was an irregular oval in shape and measured 390 cm east/west by 320 cm north/south (Figure 58). The excavation of this

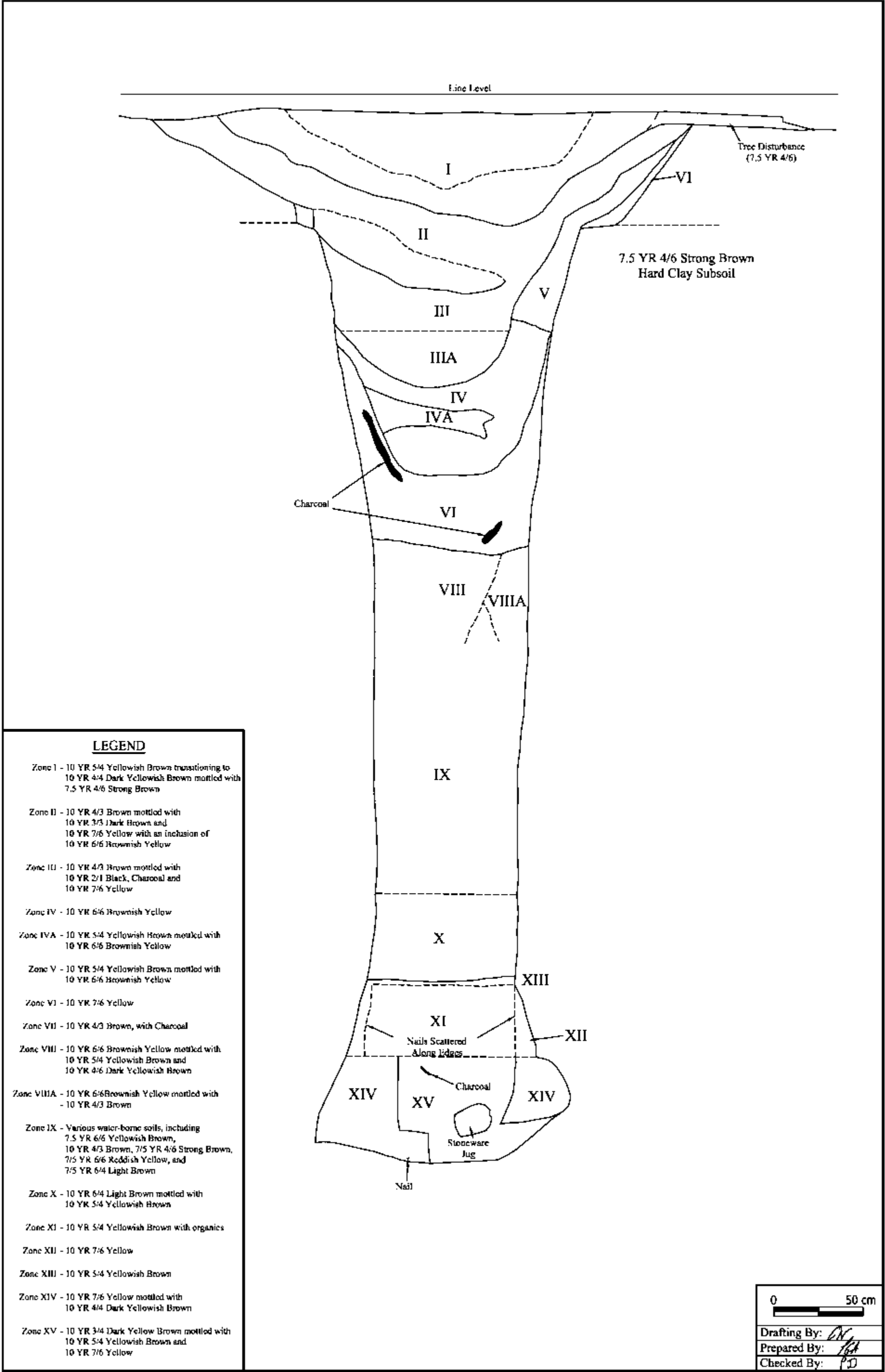
feature began at about the same time as the work on Feature 518, so its function was also unknown at first. When it was realized that Feature 518 was a well, it was assumed that Feature 502 was as well based on the similarities of the upper portion of each. Feature 502 was excavated in a similar manner, beginning with quartering the feature on north/south and east/west lines. The northwest and northeast quadrants were removed first, followed by the south half, to a depth of approximately 120 cmbs. The remaining fill was excavated by alternating between the hand excavation of one meter deep columns of fill and pulling the surrounding walls away with the trackhoe to maintain the safety of the crew.



Figure 58. Plan view of Feature 502.

The well shaft was very much like Feature 518, measuring approximately four feet square near the surface and tapering with depth. The shaft was excavated through the same series of soils to a depth of approximately 588 cmbs (19.3 feet) (Figure 59). No notches were noted in the shaft walls, so it is possible that this well was dug using a different technique than Feature 518. The walls at the base of the well had apparently collapsed, causing the base to be much wider than the rest of the shaft.

The fill removed from Feature 502 was also very similar to that found in Feature 518. All of the soils appear to have been carried into the well from surface runoff, with no



homogenous layers indicative of intentional in-fill. While discrete zones were recorded, the variation between most of them was based almost entirely on the presence of slightly more dark soil or slightly more light soil.

At approximately 468 cmbs, a zone of light sand (Zone XIII) was encountered and the walls of the shaft began to slope outward. As excavation of this zone began, a dark, square stain was noted that was approximately the same size as the well shaft above. The fill inside the stain contained a concentration of organic material and several nails were recovered from the edges. This indicates that the base of the well was lined with a wooden structure or crate. The lining extended downward to a bench of harder sandy clay located just above the base of the well.

Artifacts were sparse through the majority of the fill, but were scattered throughout the column. A brass shotshell base dating from the late 19th to early 20th century was recovered from near the surface of the feature. Other artifacts date to the Civil War occupation of the site and include both refined and utilitarian ceramics, container glass, cut nails, hand-made brick fragments, various metal objects. In addition, prehistoric ceramic sherds were also recovered.

Larger, more complete artifacts that were apparently thrown into the shaft during or just after the occupation of the camp were found resting at the base of the well. An almost complete alkaline glazed stoneware jug with a distinctive white slip flower was located in the fill within the liner at approximately 540 cmbs (Figure 60). This item was tossed into the well after the shaft had been opened long enough for some fill to accumulate at the base. A complete stoneware bottle, a complete olive glass bottle, an olive glass bottle base and a stoneware pot containing a complete olive glass bottle were recovered from the base (Figure 61). A complete tin canteen and the cuprous bands from a wooden canteen were also recovered from the base of the well (Figure 62).

Feature 493, located south of Feature 502, appeared as a large, somewhat rectangular feature measuring 299 cm north/south by 265 cm east/west (Figure 63). Although it was assumed to be a well based on its surficial similarities to Feature 502 and 518 and its location in line with those two features, the northwest quadrant was excavated to a depth of 90 cmbs to verify its function. With very little time left in the field and with the knowledge that the other wells had produced few artifacts in their upper levels, Feature 493 was excavated using a more aggressive approach. It was decided to remove the upper 10 feet of the shaft using the trackhoe. The feature was bisected on an east/west line and the north half of the shaft and surrounding soils removed (Figure 64). The soil from the shaft was spread on the ground surface and visually inspected for artifacts. The shaft was excavated to approximately 340 cmbs (11 feet) and the profile drawn (Figure 65). A sufficient amount of the surrounding soil was removed to ensure the safety of the crew. The south half of the shaft and the surrounding soil was then removed in the same manner. This process was repeated to 440 cmbs. The remainder of the shaft fill was removed by hand in the same manner as the other two wells.



Figure 60. Stoneware jug in situ, Feature 502.



Figure 61. Bottles and stoneware pot *in situ* at the base of Feature 502.

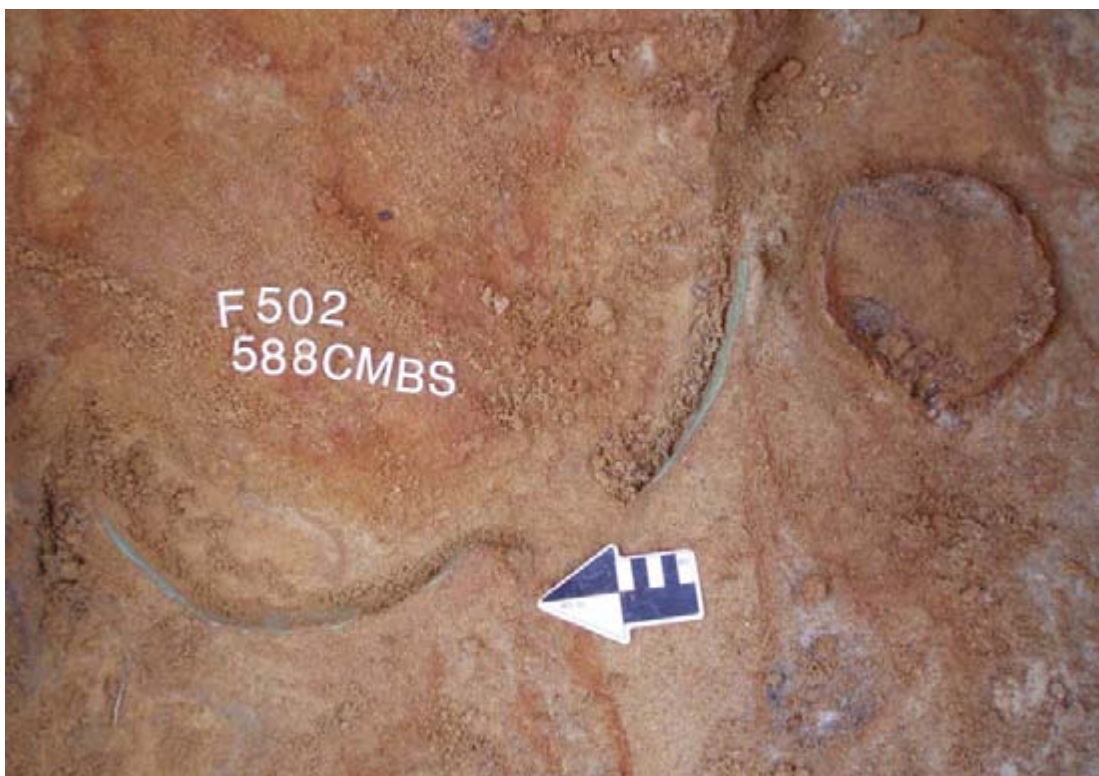


Figure 62. Drum canteen and canteen bands *in situ* at the base of Feature 502.



Figure 63. Plan view of Feature 493.



Figure 64. Profile of the upper portion of Feature 493.

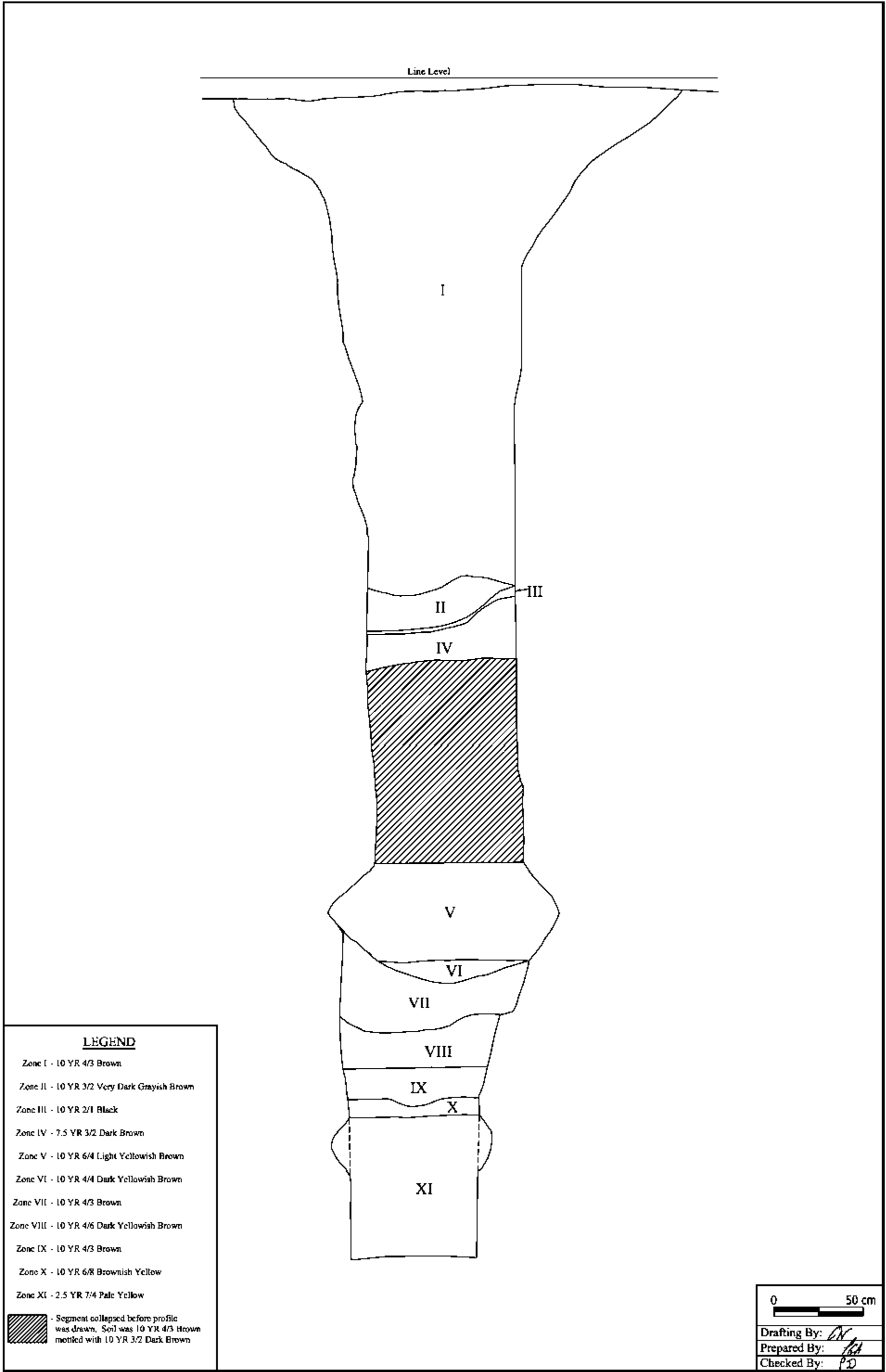


Figure 65. Feature 493, south profile.

The profile resulting from the excavation of the upper 440 cm of the shaft revealed that this well had been filled by a large amount of water-borne soils like the other two. However, this fill stopped at approximately 158 cmbs, where a homogenous zone of brown silty sand began. This zone extended to the surface, indicating that the remaining open portion of the well was intentionally filled, likely in one episode. Although the soils were not screened, no artifacts were noted from visual inspection of the fill, which further indicates the rapid filling of this portion of the shaft.

Hand excavation of the feature began where the mechanical excavation ended at 440 cmbs. The walls of the shaft were found to have collapsed from approximately 440cmbs to 500 cmbs and from 583 cmbs to 615 cmbs. Below the first collapse, the shaft was found to be offset from its location above, possibly due to softer, sandy clay that caused the collapse. The fill continued to include various water-borne deposits to the bottom of the shaft at 663 cmbs (21.8 feet).

Very few artifacts were recovered from Feature 493. A possible tin-type frame and a container glass sherd were the only items recovered from the removal of the first quarter section of the feature. A large brick fragment was located in the northern half of the feature between 340 and 440 cmbs. Hand excavation of the lower portion of the well produced approximately one half of a blue transfer printed plate (Figure 66), a metal tool handle, a few container glass fragments and brick fragments. The plate was located approximately 602 cmbs. The small amount of material recovered from Feature 493 suggests that it was open only a short period of time. Its location south of the more active areas of the camp may also account for this as there was probably less material on the surface to wash into the shaft.

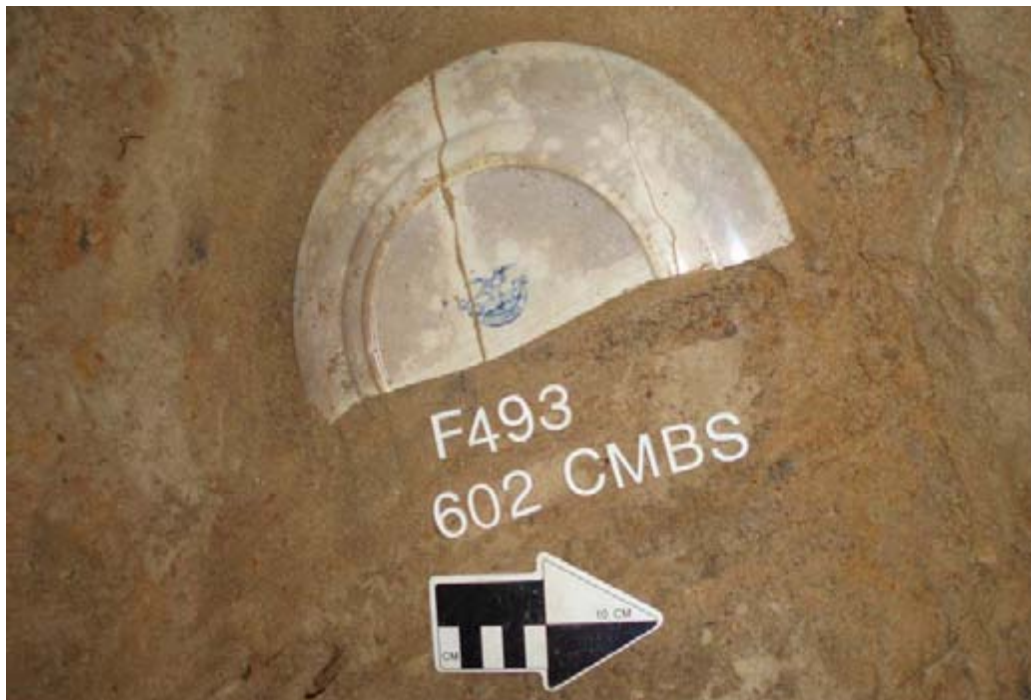


Figure 66. Blue transfer printed plate *in situ* near base of Feature 493.

Pits and Prehistoric Pits

The most common form of feature recorded at Florence was the pit (Figure 67). Pits ranged widely in shape, size and profile. Specific functions were determined for some, such as two large examples that likely served as sources of clay for hut chimneys, but the purpose for most of them was unclear. Many were probably excavated specifically for the disposal of refuse, while others may have served as sources for fill or other unknown functions. Four pits likely attributed to a prehistoric occupation of the site were excavated. Their affiliation could not be determined until the feature was excavated and either only prehistoric materials were recovered or discrete stratigraphic layers containing only prehistoric materials were encountered.

Feature 215 appears to have been used exclusively as a refuse disposal pit (Figure 68). Located just east of one of the huts (Feature 212), it was roughly round in plan and measured 212cm east/west by 190cm north/south. The feature was bisected on a north/south line, with the western half removed first (Figure 69). The pit contained a relatively dark, homogenous layer of fill (Zone I), which overlay a layer of dark, highly mottled silty sand (Zone II) that contained charcoal and a dense concentration of artifacts. The base of the pit was covered by a lighter, mottled silty sand with pockets of clayey sand, which ended at 32 cmbs. A large rodent tunnel was also noted at the base. Zone II contained a large amount of animal bone, including several large elements. The disposal of food remains likely accounts for the organic character of the surrounding soil. A wide variety of other artifacts were also recovered, including large stoneware sherds, a complete olive glass bottle, other container glass fragments, military buttons, ammunition, nails and a large amount of metal fragments. Portions of a broken tin canteen were also recovered.

Feature 217 (Figure 70) was located just north of a hut, Feature 216. The pit was oblong in plan and measured 217 cm east/west by 115 cm north/south. The feature was bisected on a north/south line with the western half removed first. The fill was found to be a complex series of mottled but stratified soils (Figure 71), which appeared to have been intentionally thrown in the pit in a number of discrete episodes. Two zones (III and V) were composed of heavy concentrations of charcoal in organic soils and contained calcined bone and nails. These layers may be the result of the cleaning of cooking hearths or stoves. Animal bone, refined and utilitarian ceramics, container glass and metal fragments were recovered from throughout the fill. The base of the feature was located approximately 75 cmbs, well into the hard, red clay subsoil. One large and two smaller decayed boards were noted lying directly on the base of the pit. It appears that they were dumped there, but this is uncertain as sawn lumber would have been a precious commodity. The walls of the pit were found to bell out as much as 30 cm under the upper sandy subsoil.

While Feature 217 was obviously used as a refuse disposal pit, this was likely not the only reason it was excavated. As discussed above, the huts erected by the soldiers in winter quarters were generally fitted with an external chimney constructed of sticks and clay or some other wooden substitute, such as barrels or crates coated with mud. This technique required a source of clay, which was not readily available to this portion of the camp. A simple solution would be to dig into the clay that lies beneath the sandy subsoil, then use



Figure 67. Excavated pits and prehistoric pits.



Figure 68. Plan view of Feature 215.

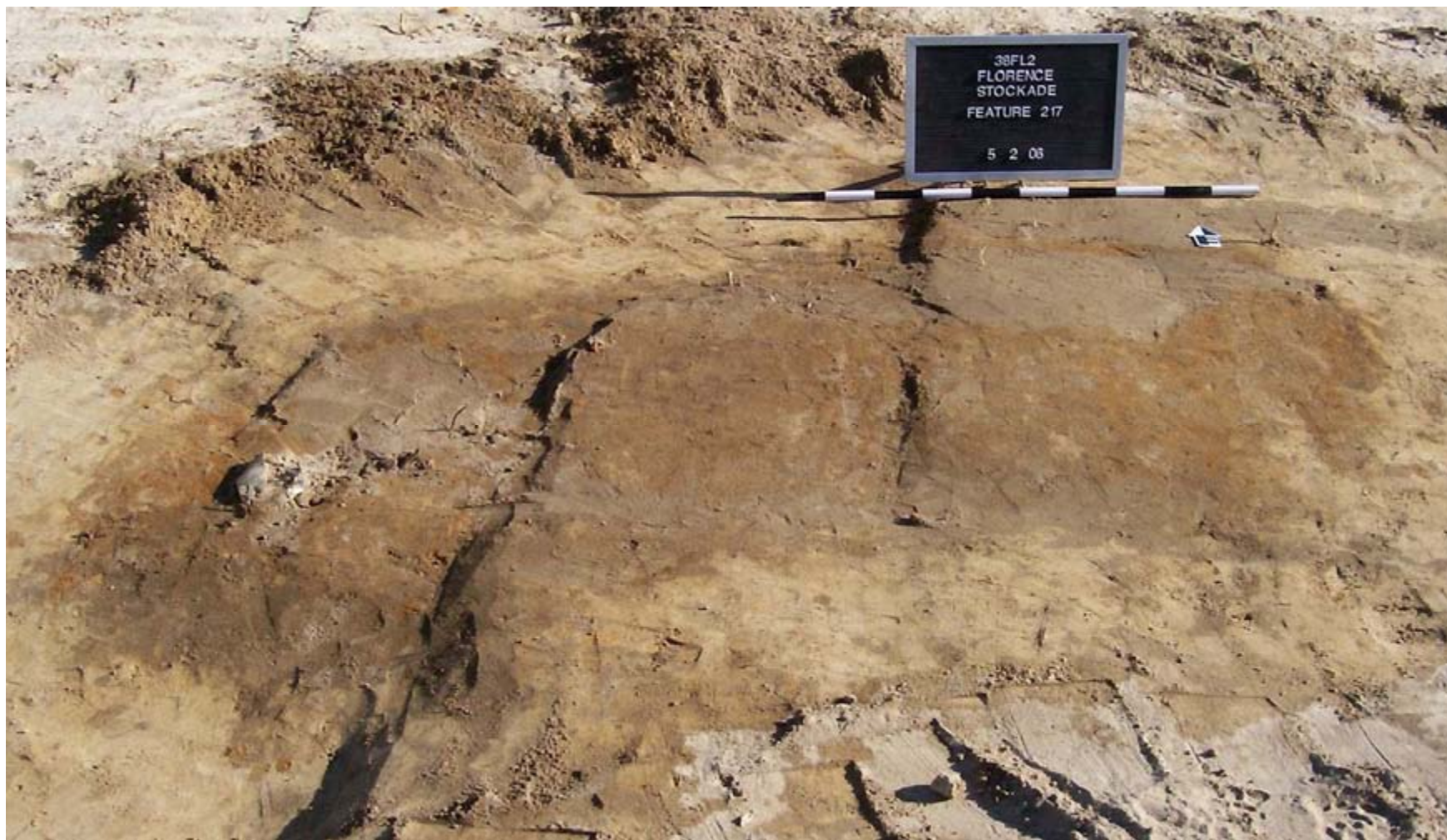
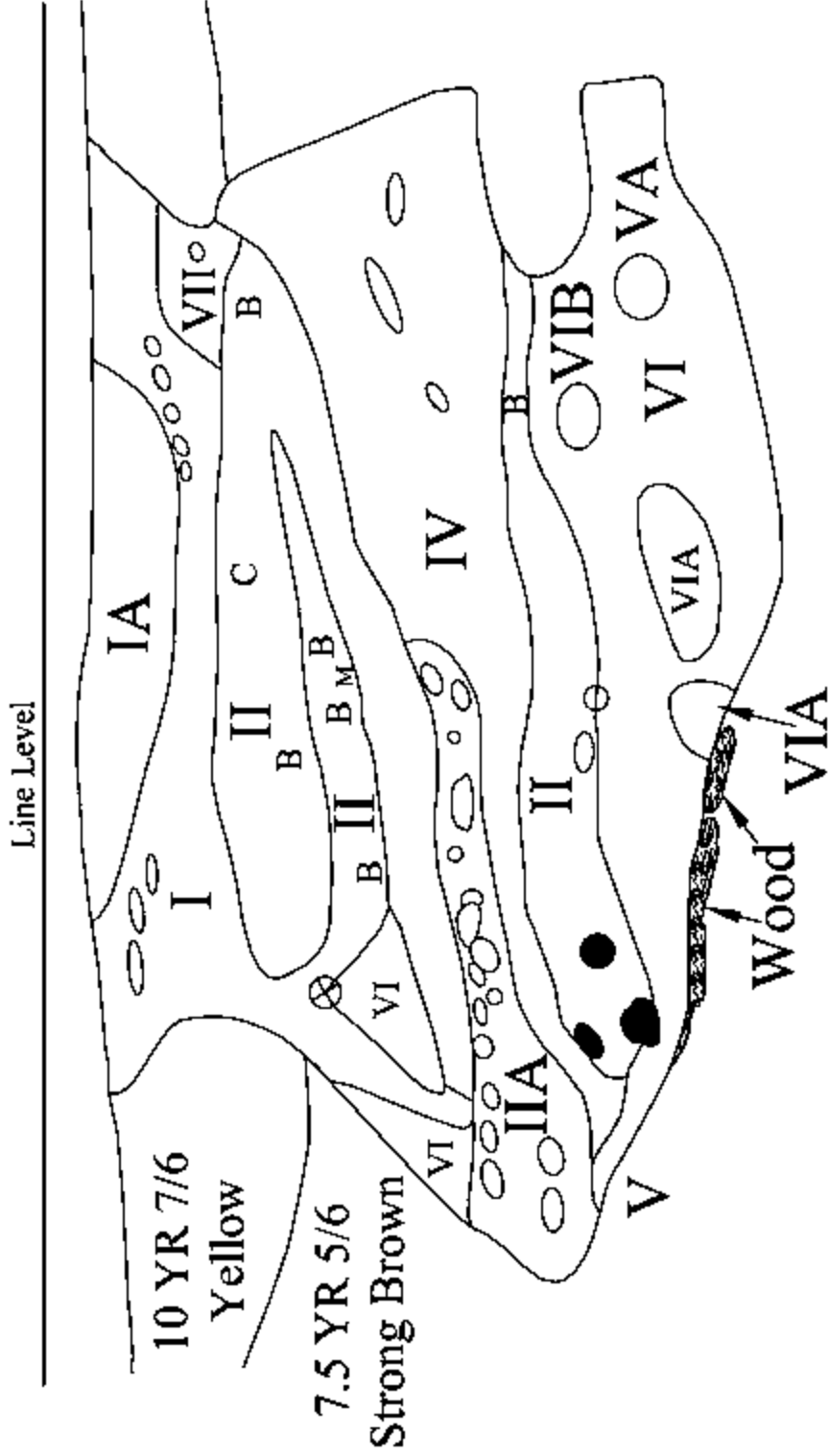


Figure 70. Plan view of Feature 217.



LEGEND

Zone I - 10 YR 6/4 Light Yellowish Brown

Zone IA - 5 YR 5/8 Yellowish Red Silty Clay

Zone II - 5 YR 3/4 Dark Reddish Brown with Charcoal

Zone III - 10 YR 3/2 Very Dark Greyish Brown with Ash

Zone IV - 10 YR 7/4 Very Pale Brown with 10 YR 5/3 Brown in Laminar Band

Zone V - 10 YR 4/3 Brown

○ - 7.5 YR 5/6 Strong Brown Clay Inclusions

B • Bone

C • Ceramic

M • Metal

● • Root

⊗ • Bottle Fragment

0 20 cm

Drafting By: *AK*

Prepared By: *AK*

Checked By: *PD*

Figure 71. Feature 217, cast profile.

the resulting pit for the disposal of camp debris. The bell shape of the walls suggests that the upper portion of the pit was kept as small as possible but the clay was gathered from a broader area within the excavation.

Feature 425 (Figure 72) was located to the southwest of the hut designated as Feature 221. The shape of the feature was irregular at the surface, with the west end rectangular and the east end more rounded. There was no differentiation between the fill on either end, so it was presumed that it was one feature and not one superimposed on another. The feature was very large, measuring approximately 280 cm east/west by 155 cm north/south. It was divided into quadrants on north/south and east/west lines, with work beginning on the southeastern quad. The walls of the pit were found to be nearly vertical, with a slight undercut in some places. The floor was deepest from the middle west, with a raised bench on the eastern end. The deepest portion of the pit extended 86 cm below the surface.



Figure 72. Plan view of Feature 425.

Excavation of the feature revealed a very complex array of fills (Figure 73). Eighteen zones were identified, with some located only in small, discrete areas and others that covered the entire area of the pit. Many of the zones varied slightly, generally depending on the proportion of mottling. The soils were generally silty sands with varying degrees of light and dark soils mottled together. Pockets of sandy clay were also found within some zones. Small zones of charcoal and burned bone likely represent individual dumping episodes. Generally, it appears that the western half of the feature was filled first. The lower zones are highly mottled and appear to have been intentionally introduced into the

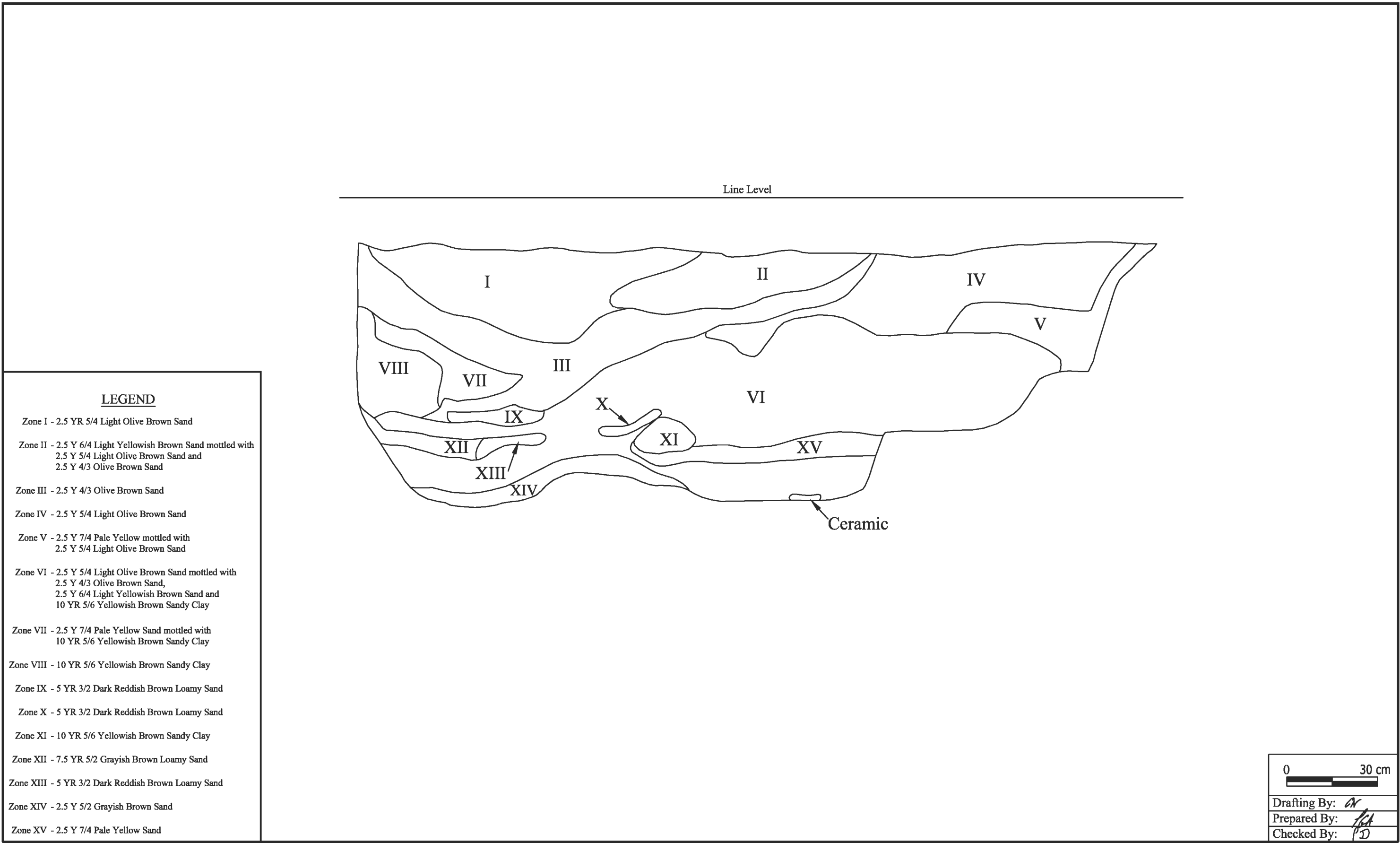


Figure 73. Feature 425, north profile.

pit. These zones are covered by lighter soils that exhibit the swirled appearance typical of water-borne deposits. These zones tapered toward the base of the pit to the west, where they were covered by slightly less mottled soils that appear to have been used to fill the western end of the pit.

A large number of artifacts were recovered from Feature 425, including large fragments of large animal bones. Recovered materials included small fragments of container glass, brick fragments, nails, metal fragments, ammunition, buttons and a complete cartridge box tin (Figure 74). The only ceramics recovered were sherds from two large alkaline glazed stoneware jugs. Large sherds of each were recovered, comprising approximately 75 percent of one jug and 15 to 20 percent of the other. The horizontal and vertical distribution of the sherds within the feature provides some insight as to the shape and elevation of the floor (Figure 75). The first fragments of both vessels were encountered at approximately 38 cmbs near the outer edges of the pit. The first vessel deposited in the pit was located just east of the center on the very bottom, although three fragments of the handle were located between 38 and 42 cmbs near the northern wall. The difference in elevation likely reflects the slope of the floor. The second vessel was slightly more scattered. The entire base was recovered as two halves from the very eastern end of the pit. Discovered at only 38 cmbs, these sherds were resting above a bench in the clay floor of the pit. The remainder of the vessel was from the western end of the pit, with the sherds in a rough north-south line extending to the southern wall. These sherds were recovered from depths ranging from 53 to 58 cmbs.



Figure 74. Cartridge box tin *in situ*, Feature 425.

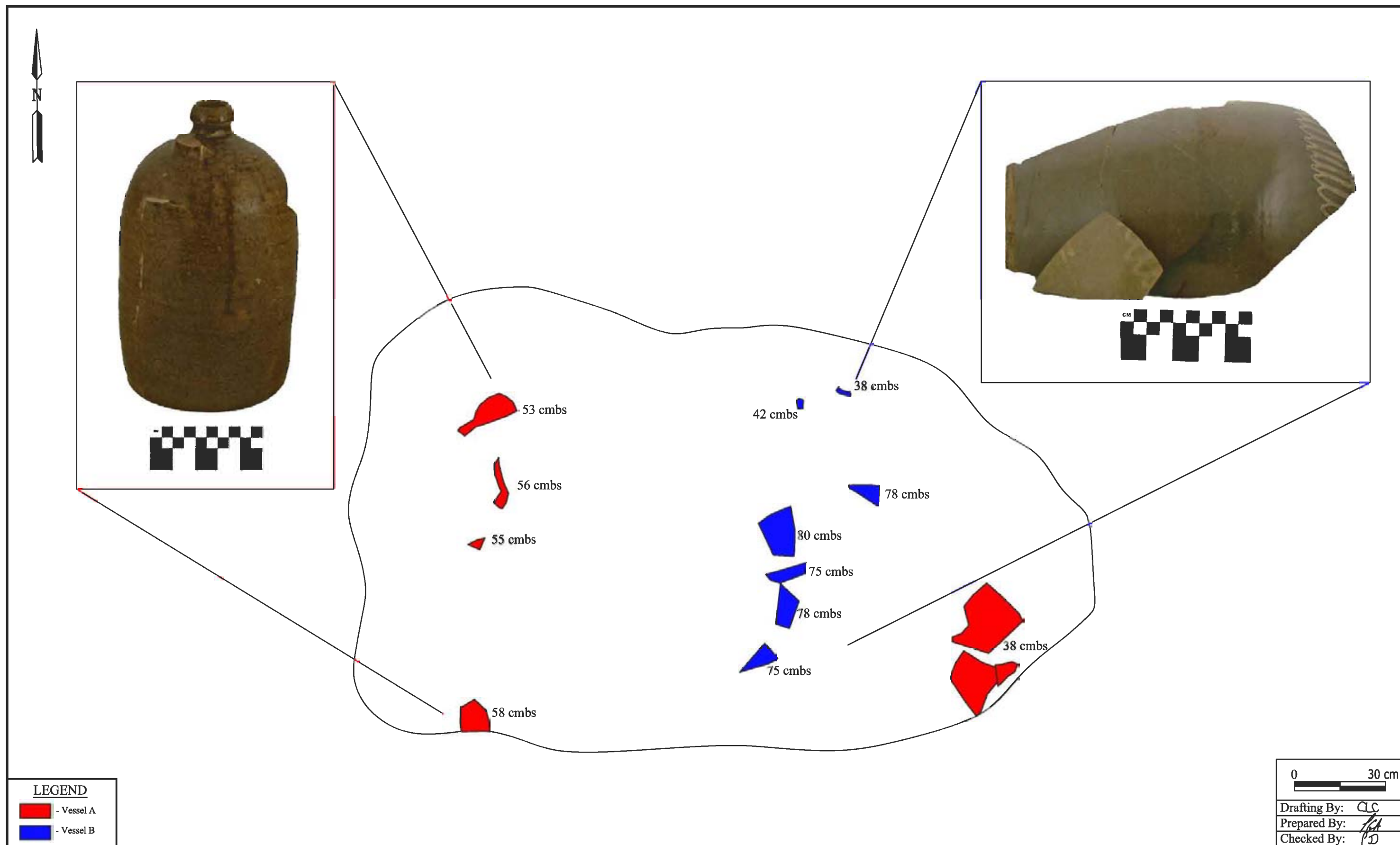


Figure 75. Distribution of sherds from two stoneware vessels, within Feature 425. Each sherd is marked with the depth from which it was recovered.

Like Feature 217, Feature 425 was excavated into the hard subsoil clay. Therefore, it is likely that this pit was excavated with the dual purpose of providing clay for the construction of hut chimneys and as a place for camp refuse. The artifact assemblage differs, however, in that the material recovered was not as diverse, with only two ceramic vessels represented and no complete or large fragments of glass containers. This may reflect the period that the pit was in use, the location of the pit relative to other camp activities or the personnel who used it. This issue will be dealt with further in Chapter 5.

Feature 346 (Figure 76) may also have been excavated as a source of clay, but was not used as a refuse disposal pit afterwards. Located north of the hut designated Feature 85, the pit was ovoid in shape, but was located within the bounds of a large, irregular stain. It appears that the surrounding stain was the result of disturbance not actually related to the feature. The actual pit measured approximately 167 cm east/west by 105 cm north/south and extended to a depth of approximately 60 cmbs. The feature was bisected with the south half removed first. Excavation revealed that the pit had apparently been left open for a long period, as the fill was composed entirely of water borne soils (Figure 77). A tree root had intruded on the western end of the pit, leaving a small area of charcoal or decayed plant matter. The base of the pit extended well into the subsoil clay and was irregular in shape.

While Features 217 and 425 produced large amounts of artifacts, Feature 346 produced very few. Only small fragments of olive container glass, cut nails, metal fragments and a musket ball were recovered. It seems unlikely that a pit located within an apparent area of high activity would have been allowed to remain open without having refuse introduced into it. Therefore, this pit may have been excavated for an unknown reason after the camp was abandoned. The few artifacts recovered date to the Civil War period, but could easily have been washed into the pit or brought in through other disturbance of the area.

One example of a pit apparently related to cooking was recorded southwest of Feature 85. Feature 286 (Figure 78) was an elongated hour-glass shape measuring 284 cm north/south by 45 cm east/west. The feature was bisected lengthwise (north/south) with the eastern half removed first (Figure 79). The feature consisted of fired clay basins connected by a shallow pit containing mottled silty sand. The clay basins appeared to have served as either hearths or stove bases, as charcoal and animal bone fragments were concentrated around them. Only the southern edge of the northern hearth survived. Very few artifacts were recovered, including a percussion cap and several fragments of metal, possibly a can or similar vessel. One prehistoric ceramic sherd and one flake were also recovered.

A photograph of a member of the 153rd New York Infantry cooking in camp in 1862 (Figure 80) shows a small, oval stove that may explain the burned areas within Feature 286. The stove in the photograph appears to be resting on a base of brick or packed clay. Another similar stove is in use in the background near a row of Sibley tents. The two burned areas on either end of Feature 286 (Figure 81) may indicate that one of these stoves (or one similar) was relocated sometime during its use or that two stoves were in use in this area.

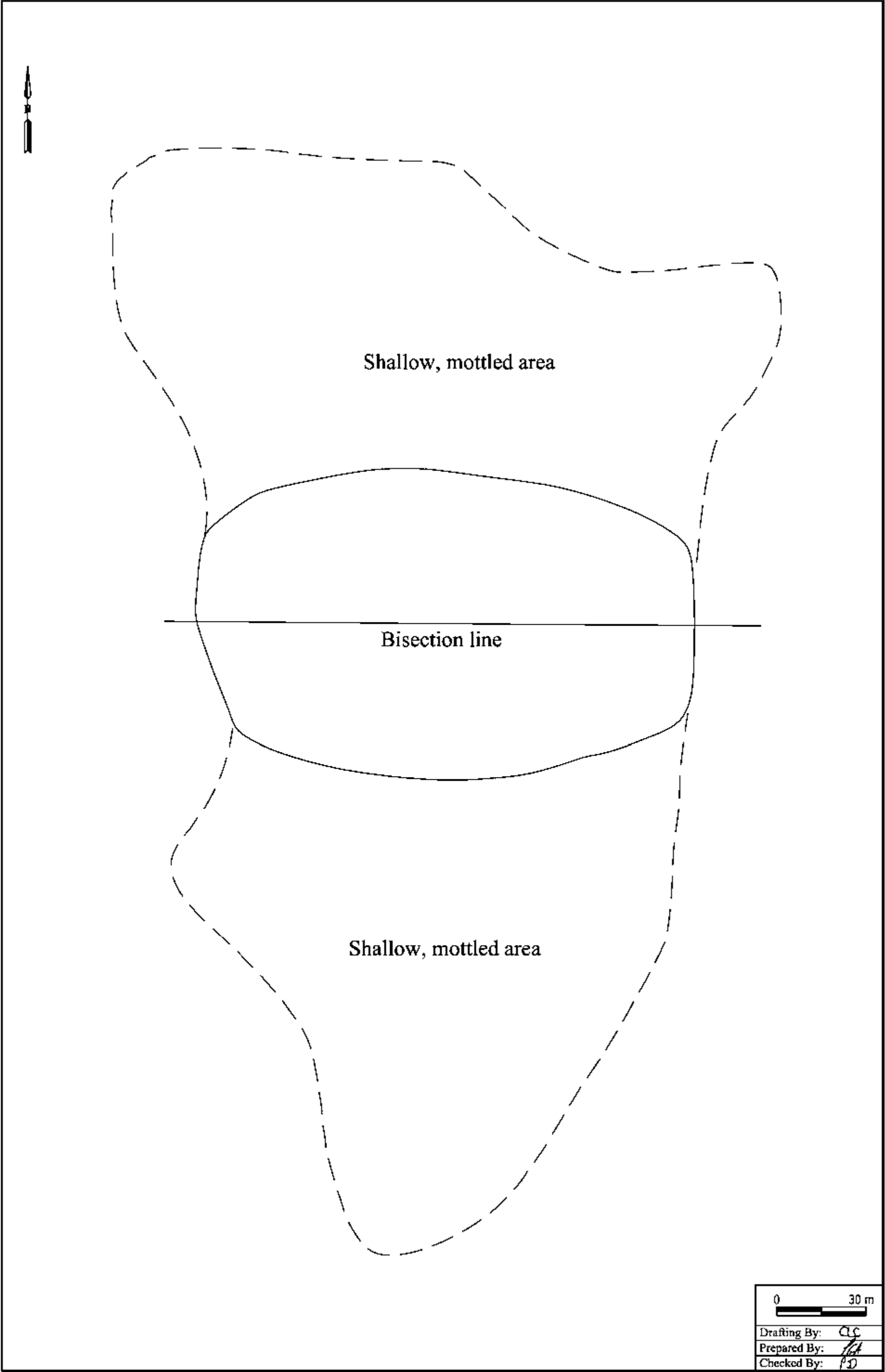


Figure 76. Feature 346, planview.

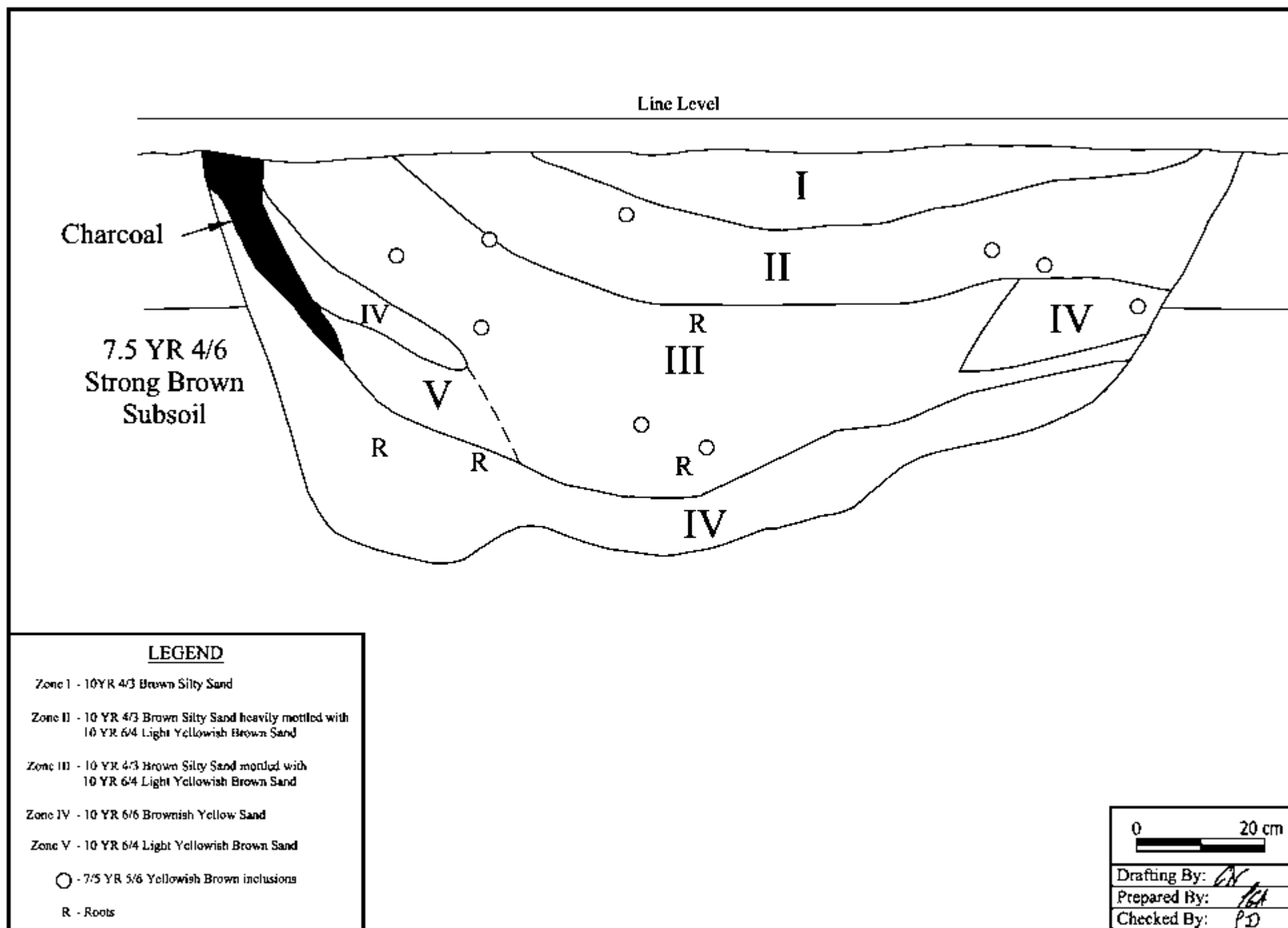


Figure 77. Feature 346, north profile.



Figure 78. Plan view of Feature 286.



Figure 80. Member of the 153rd New York using a cook stove in 1862 (Brady Collection, Library of Congress).



Figure 81. Detail of possible stove base, Feature 286.

According to the regulations of both the Union and Confederate armies, the kitchens for each company were to be placed 20 paces behind the rear rank of the company's tents (USWD 1861, CSWD 1863). Whitehorne (2006:44) quotes a Union soldier who described their cooking pits as being four feet long and two feet deep with the fire in the center. A forked stick was placed at each corner of the trench to support a pole laid parallel to the length of the trench. Shorter sticks were laid across these two to allow kettles and pots to be suspended over the fire. The period photograph described above demonstrates that variations from the regulations existed in U.S. Army camps and certainly within Confederate camps as well.

Other pits were generally smaller, round or ovoid in shape and relatively shallow. Most were filled with varying amounts of material and animal bone. No clear function for the majority of them was noted, although many were likely dug as an expedient location for the disposal of refuse. A good example of this was Feature 83 (Figure 82), located southeast of Feature 85. The feature was an irregular rectangular shape measuring approximately 80 cm north/south by 70 cm east/west. The feature was found to be very shallow and filled with a very tight concentration of large, fragmentary animal bones, with minimal soil matrix (Figure 83). The base of the pit was covered by a dark, organically stained silty sand and was relatively flat. No other artifacts were recovered, which may indicate that the bones were covered over immediately after deposition.

Some of the pits simply show no logical reason for having been excavated. Feature 219 is a good example (Figure 84). Located on the western edge of the project area north of Feature 216, this pit was a rounded rectangle in shape and measured 70 cm north/south by 60 cm east/west. The pit was found to be approximately 30 cmbs in depth, with an irregular base (Figure 85). The fill consisted of a dark zone of silty sand which covered a thin layer of dark soil containing charcoal and calcined bone. This dark soil overlay a sandy layer similar to Zone I, which rested on the subsoil clay base of the pit. Faunal remains were recovered from both Zones I and II, while artifacts were recovered only from Zone I. Fragments of two ceramic vessels were recovered, along with a partial tin can. While the pit was obviously used for the disposal of a small amount of refuse and possibly as a dump for cleaning out a fireplace or stove, it seems large to house such a small amount of refuse. This suggests that it was dug for some other reason, but what that might be remains a mystery.

Four pits that apparently date to the prehistoric occupation of the site were also excavated (see Figure 67). These pits were generally shallow and more intensely disturbed than the historic features. Feature 443 was a large, oblong pit measuring approximately 240 cm east/west by 135 cm north/south located in the southern half of the project area near the western boundary. The feature had been impacted by plowing and further truncated by the backhoe. The pit was shallow, extending no deeper than 20 cmbs, and was filled with a mottled silty sand. One grit-tempered cord-marked ceramic sherd and two animal bone fragments were the only materials recovered, so the purpose of this pit is not known. Feature 447, located to the northwest of Feature 443 was similar. It was an oblong pit



Figure 82. Plan view of Feature 83.

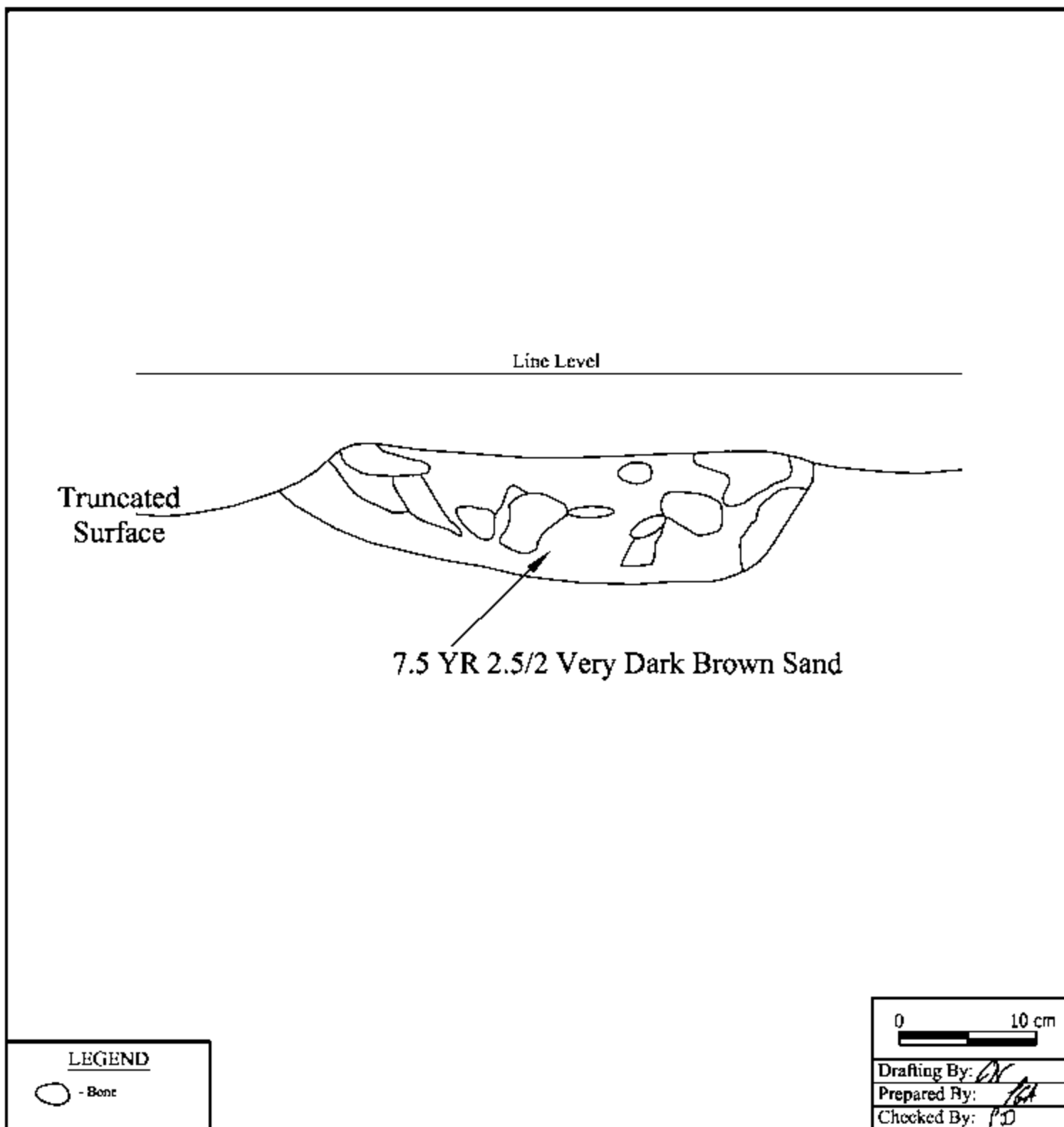


Figure 83. Feature 83, south profile.



Figure 84. Plan view of Features 219 and 220.

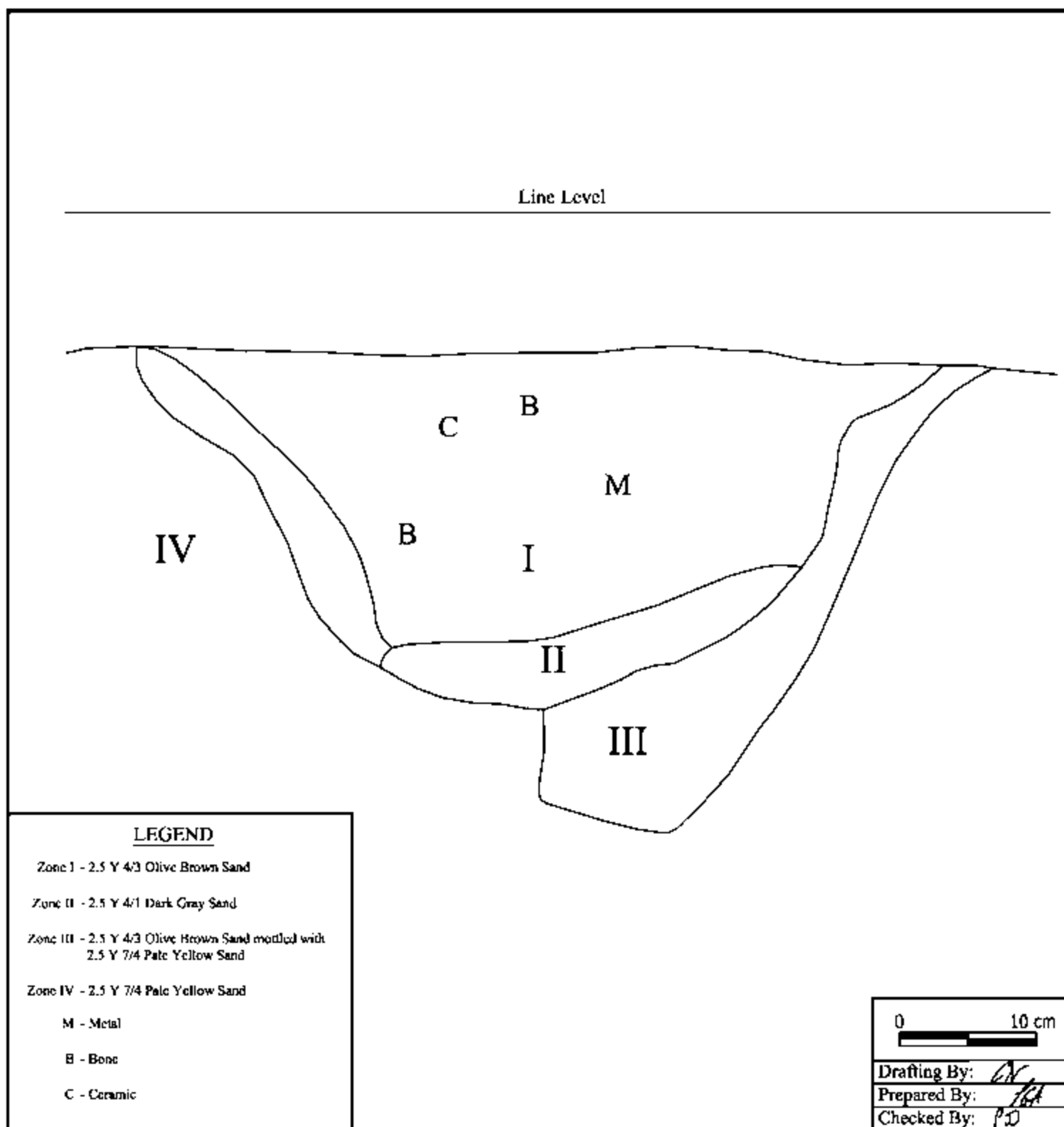


Figure 85. Feature 219 north profile.

measuring 125 cm east/west by 75 cm north/south, although feature fill had apparently been spread to the north and west by plowing and bioturbation. This feature was also shallow, with the dark, mottled fill extending only 8 cmbs. Three prehistoric ceramic sherds and one projectile point were recovered. The base of the pit was irregular and was marked by root intrusions. It appears that this feature was a prehistoric pit, but has been heavily impacted by plowing and tree growth. Feature 471, located on the eastern project boundary, had also been extensively disturbed by plowing. Feature fill had been spread across an area covering 162 cm north/south and 128 cm east/west, with two large plow scars running across the feature north/south. The only remnant of the actual pit lay between the two plow scars and extended to a depth of only 7 cmbs. One flake and three prehistoric ceramic sherds were recovered.

Feature 451 (Figure 86) was a large, ovoid feature located in the northwestern quadrant of the project area. It measured 155 cm east/west by 149 cm north/south and was bisected on a north/south line. The fill was generally a dark, mottled silty sand, but contained a very large amount of burned, fragmented animal bone (Figure 87). The bone was particularly dense in the eastern half, with many areas containing more bone than soil. A dark, ashy layer was located immediately beneath the bone concentration. The pit had an irregular base but was generally basin shaped and extended to a maximum depth of 29 cmbs. Other artifacts recovered included prehistoric ceramics and a flake. This feature was well preserved and was actually larger than it appeared on the truncated surface. It appears that this pit may have been used as a cooking pit, although no burned soil deposits were noted. It may have been used as a simple disposal pit as well.

Posts

Features identified as posts were generally round or square in shape, with a clear termination below the surface (Figure 88). Posts were often difficult to differentiate from small pits or root disturbances and almost always contained artifacts. Some included clear post molds, while most were simply round or square stains that were square to basin shaped in profile. Feature 309 included a very clear post mold both in plan and profile (Figures 89 and 90). Located west of Feature 85, Feature 309 was square in plan, measuring 40 cm east/west by 35 cm north/south. The square post mold was located in the southern corner and consisted of a dark, organic mottled fill. The post extended to a depth of 57cmbs. The post hole was filled with a light, mottled silty sand, with a small zone of darker silty sand included. The hole extended to a depth of 42cmbs. Both the hole and mold were flat across their bases. Only two fragments of olive container glass were recovered.

Examples with no obvious post mold include Features 550 and 551 (Figures 91 and 92) which were located side by side in the southeastern portion of the project area. Feature 550 was an irregular square in shape (40cm n/s by 30cm e/w) while Feature 551 was irregular but more rounded in plan (31cm n/s by 26 e/w). Both were filled with a dark, mottled silty sand and were roughly square in profile (Figure 93). Only faunal remains were recovered from both post holes.



Figure 86. Plan view of Feature 451.

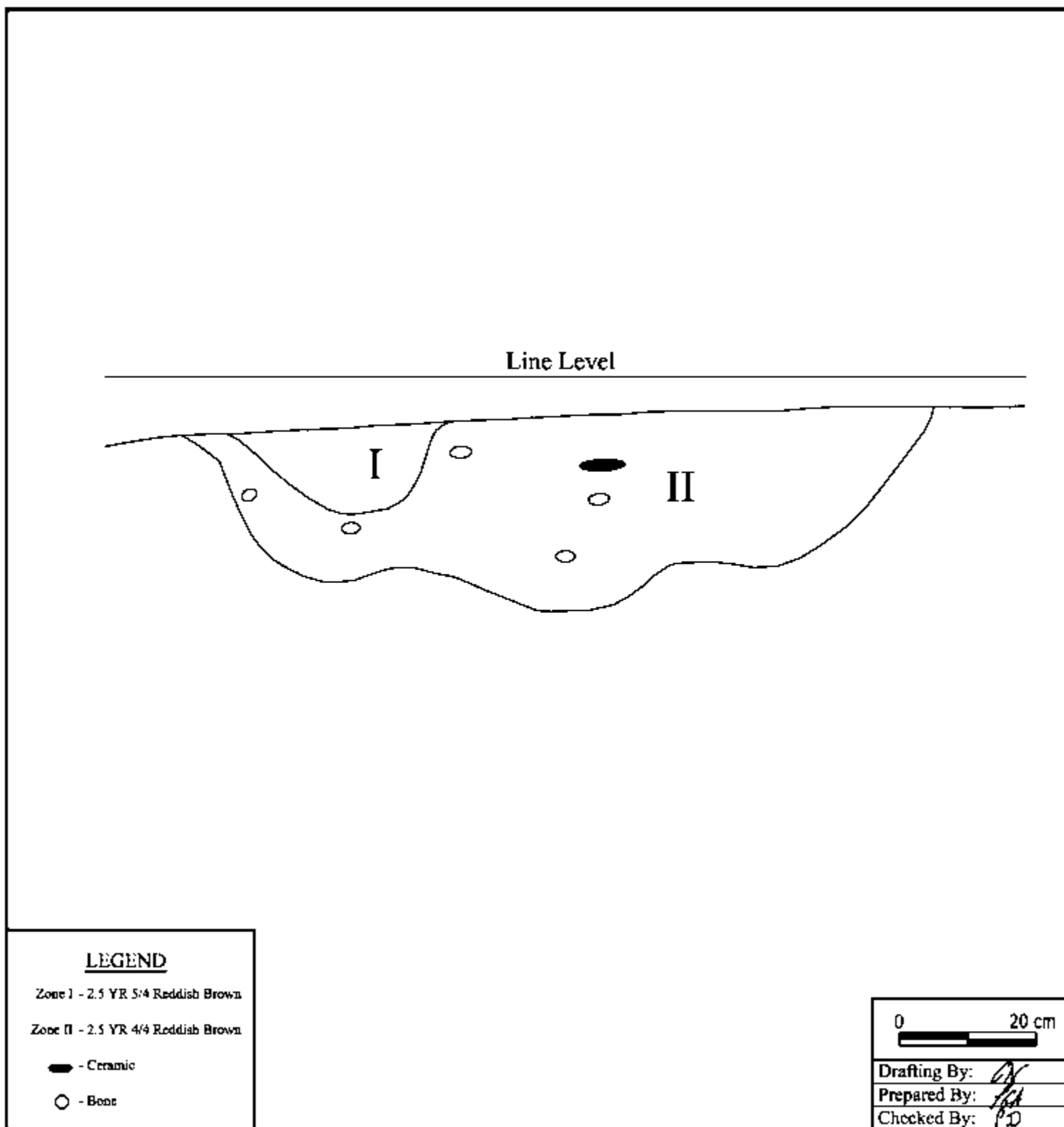


Figure 87. Feature 451, west profile.

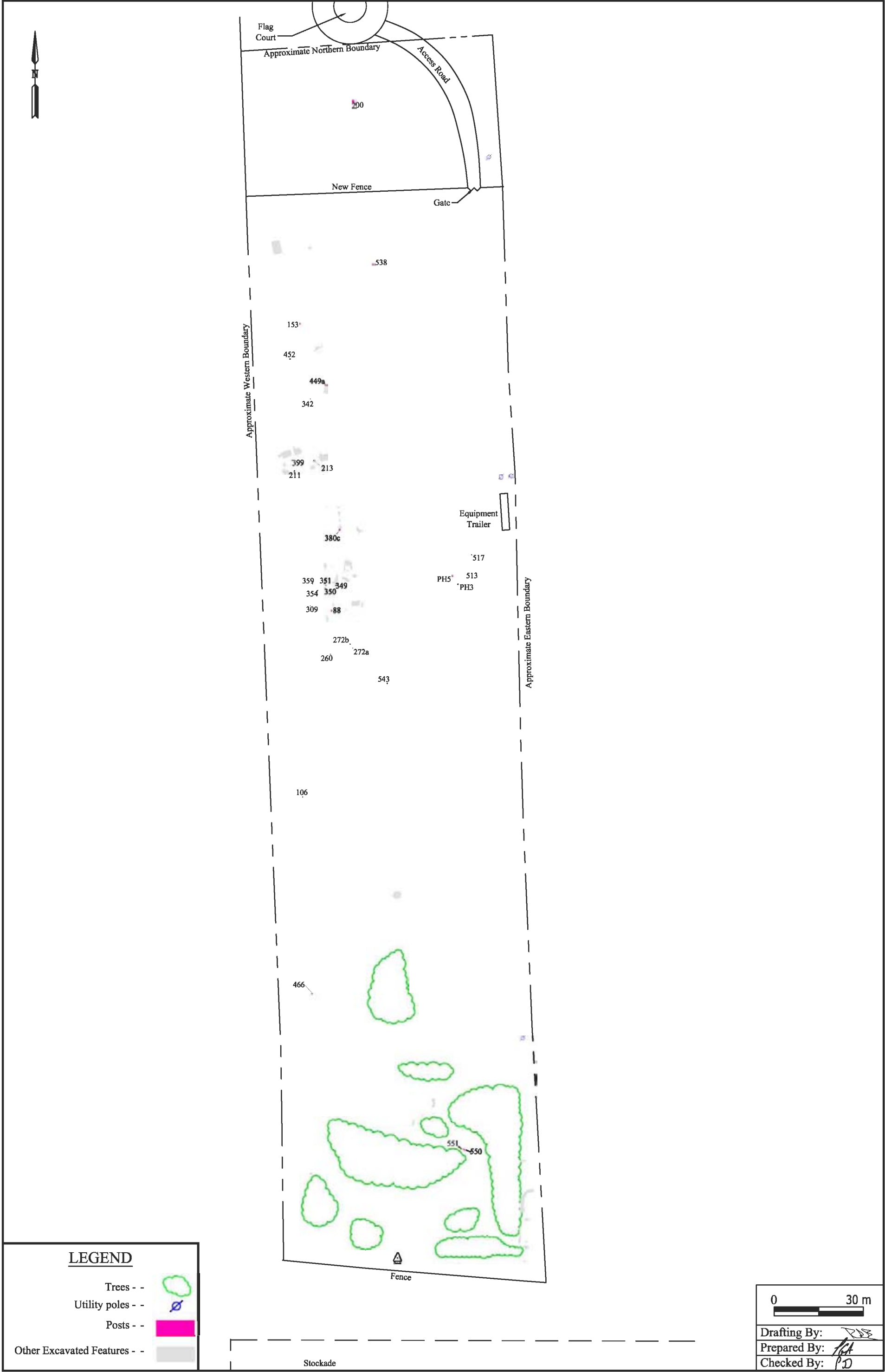


Figure 88. Excavated posts.



Figure 89. Plan view of Feature 309.

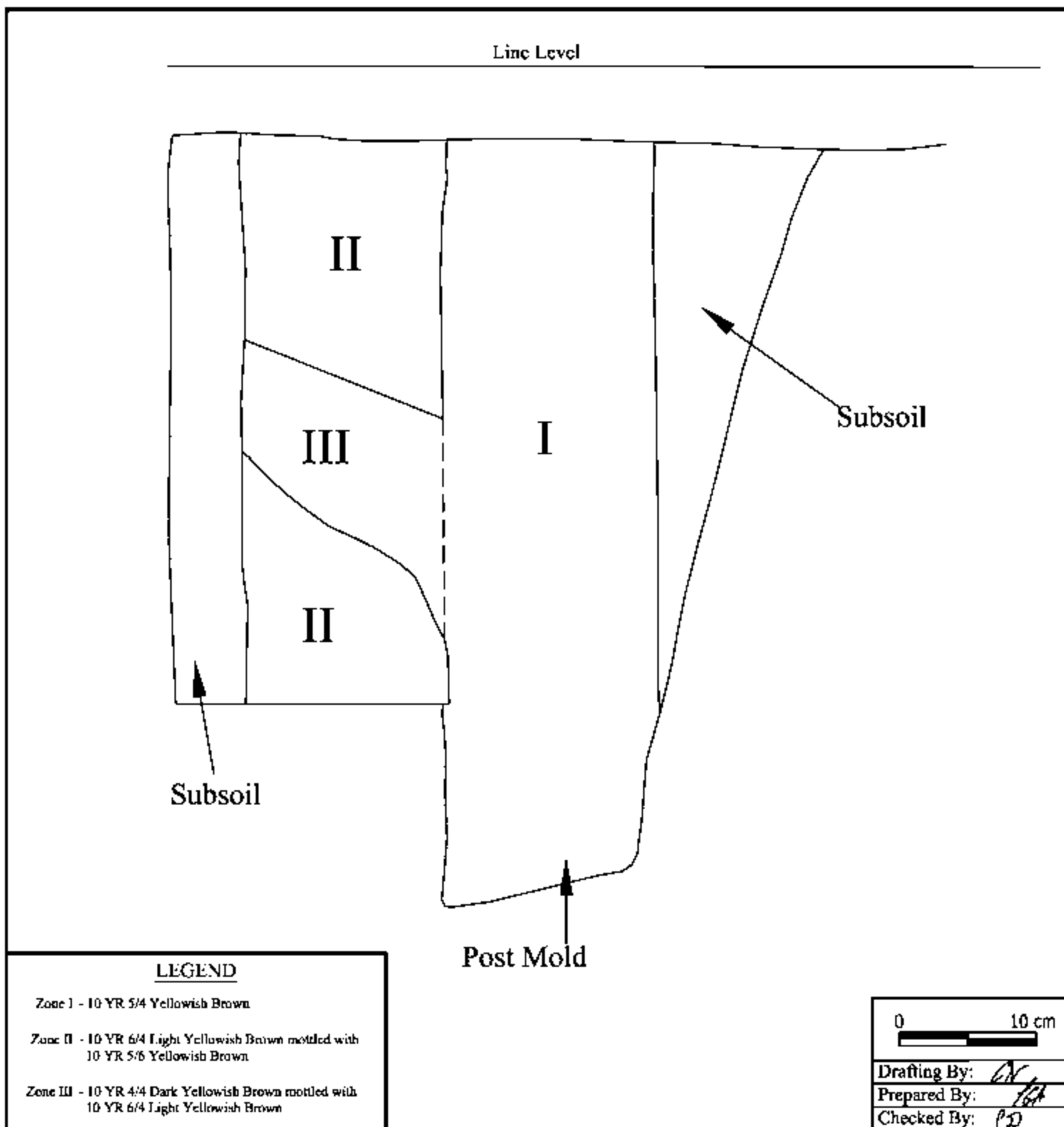


Figure 90. Feature 309, northeast profile.



Figure 91. Plan view of Feature 550.



Figure 92. Plan view of Feature 551.

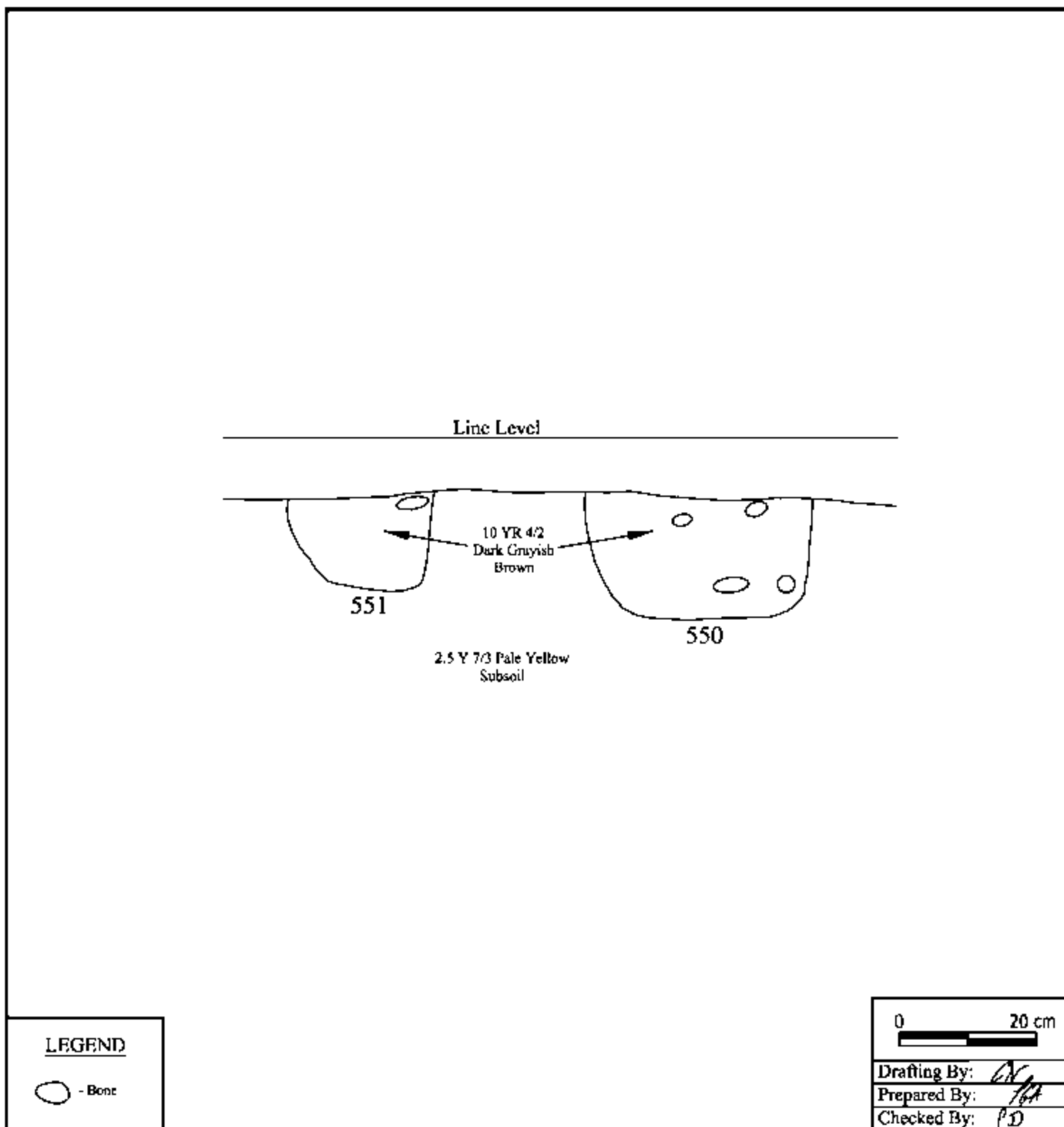


Figure 93. Feature 550 & 551, north profiles.

The specific functions for the posts represented by these features are unknown in the majority of cases. One rectangular arrangement of posts (Feature 513) (Figure 94) probably marks the location of a small stock pen. Given the use of this property for agricultural purposes after the war, linear patterns of posts would be expected marking fence rows. Few, if any such patterns were noted. The majority of the posts recorded exist as singular features, often near other types of features. Their relationship to other features and their specific functions remain unclear.



Figure 94. Plan view of Feature 513. The orange flags mark the individual posts.

Trees and Disturbances

A large number of relatively large and amorphous features were encountered (Figure 95). Many of these were related to the planting and removal of pine trees from the site. Features created by trees were typically either relatively small, round and extended well into the subsoil or were large and shallow with multiple deep root channels. It is likely that the former were cut, allowing the root to decay in place, while the latter were pushed down by mechanical means during the initial clearing of the site. Both types typically contained a single layer of soil similar to that found in the plowzone and often contained artifacts. It is likely that artifacts from nearby features disturbed by plowing account for the materials located in the tree features. Unfortunately, the presence of artifacts on the surface of the features required many to be excavated before their non-cultural origin could be determined. Even then, it was often difficult to determine whether the feature was created by the tree or if the tree had grown through an existing cultural feature. Generally, if internal stratigraphy was noted, it was determined that the feature likely predated the tree.

Other disturbances include a wide variety of irregular, shallow intrusions likely caused by the agricultural activities that took place on the site and the extensive clearing of the area prior to the current project.



Spatial Analysis

The spatial relationships of the various features recorded and excavated at the Florence site are critical to understanding the physical layout of the camp and to establishing the specific activity areas within it. The following section discusses how various feature types relate to one another and what this indicates about the layout of the camp. This is followed by a discussion of how the portion of the camp excavated does or does not follow the military regulations of the day and what activities were taking place away from the camp itself.

In order to place the guard's camp in its proper military context, it is necessary to understand the regulations that governed the layout of the various components of an infantry camp. Camp sites were to be chosen by the Quartermaster and a small detachment of men based on factors such as topography, access to water and the location of the enemy. An army on the march would certainly be more concerned with the tactical position of a camp while rear echelon troops could focus more on finding level ground and good supplies of water. Once a location was selected, the color line was established, which marked the front of the camp and provided the reference point for the location of the rest of the camp (Figure 96). The front was to be as wide as the front of the troops while in line of battle, but could be adjusted as conditions dictated. Thus, a full regiment of infantry would have a color line 400 paces in length (USWD 1861, CSWD 1863).

The men placed their tents in ranks and files by company beginning 10 paces behind the color line. The tents faced onto streets that ran perpendicular to the color line, with members of one company fronting on the same street. The street was to be no less than 5 paces wide, with a space of two paces between each tent. The kitchen for each company was to be located 20 paces behind the last rank of tents while the non-commissioned officers, sutler and police guard were 20 paces behind the kitchen, the guards in the center. Company officers were camped 20 paces further to the rear and located directly behind their company, while the regimental officers were 20 paces behind them. The baggage train, if present, was 25 paces behind the officers along with the officer's mounts. The "sinks" or latrines of the officers were to be 100 paces to the rear of the train (USWD 1861, CSWD 1863).

In front of the color line, a large space was kept open to be used as a parade ground and for regimental drills. The sinks of the men were 150 paces in front of the color line, with an advanced guard post 50 paces further to the front. Any prisoners were to be housed approximately 4 paces behind the guard (USWD 1861, CSWD 1863).

This was what constituted the "ideal" military camp according to both armies. It allowed for the troops to deploy into line of battle quickly and helped to ensure the overall cleanliness and hygiene of the camp. In general, officers in the field attempted to use this model when laying out a new camp, with modifications for the terrain and the tactical situation. It was often easier for rear echelon units to more closely adhere to regulations as more time and care could be taken in selecting and constructing a camp site. Federal camps near Washington, D.C. that were occupied throughout the war and were highly

Camp of a Regiment of Infantry.

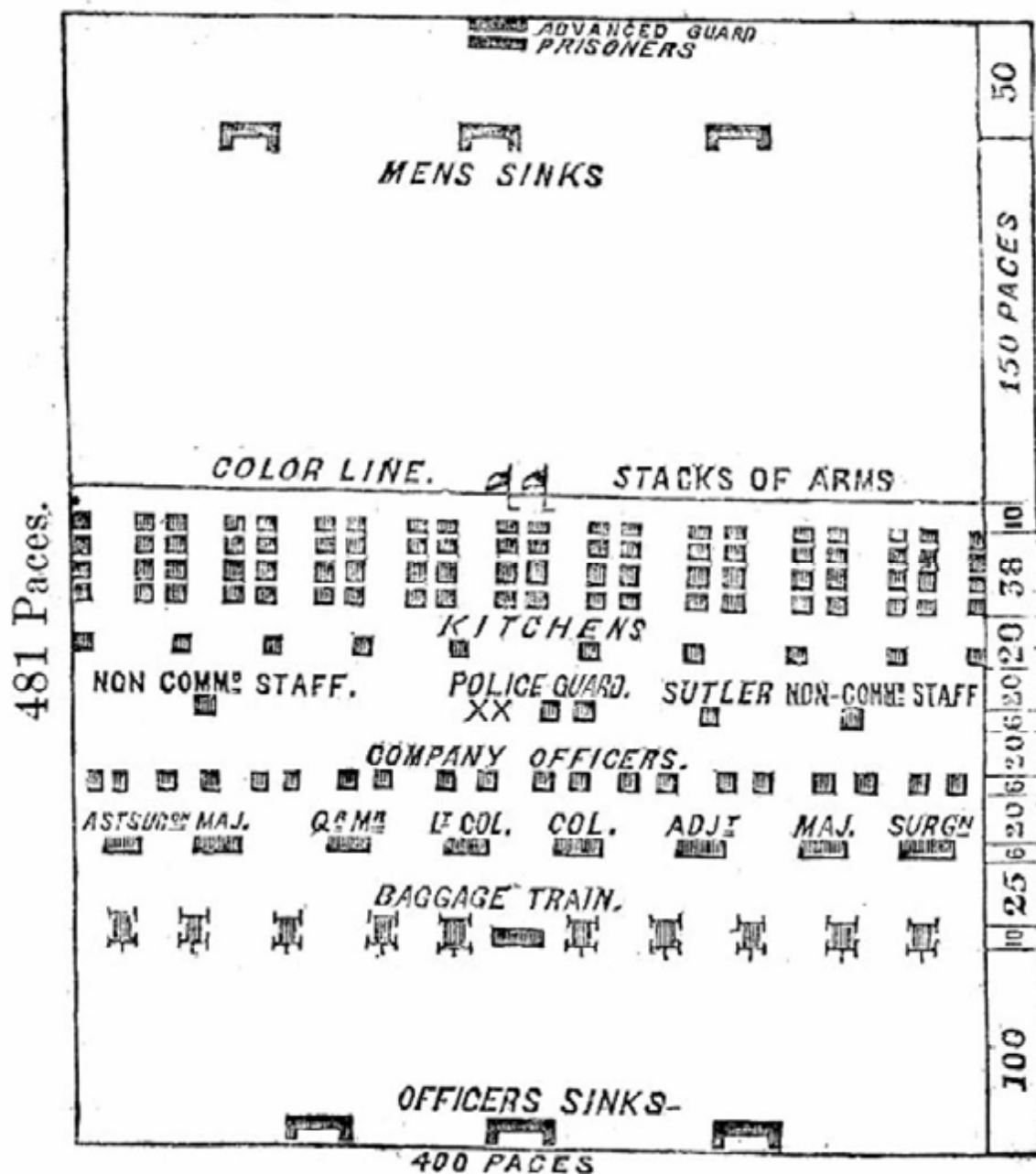


Figure 96. The regulation layout of a camp for a regiment of infantry (USWD 1861).

visible to the public were precisely laid out (Nelson 2006). However, rear echelon camps were also highly variable depending on the same factors as well as the purpose of the troops housed within the camp and their numbers, which were reduced by disease and combat as the war progressed.

In order to facilitate the discussion of the spatial relationships of the features, the project area has been divided into broad functional areas based on the concentration of features and their presumed function. Each area may include smaller, discrete, activity-based locations as well. Four large functional areas will be discussed, including the Residential Area, the Northern Perimeter, the Southern Perimeter and the Eastern Boundary (Figure 97).

The Residential Area was defined as the area within which the soldiers spent their off-duty hours. It covered an area of approximately 3 acres and included 372 (84.6%) of the recorded features. This area was the most active portion of the camp and formed the core of the site. The most important features within this area were the structures, as many of the other features were placed based on the location of the huts and tents. The structures and the other features clustered around them appear to be aligned along company streets as called for by regulations (USWD 1861, CSWD 1863). Eight streets can be identified within the Residential Area that define six blocks (Figure 98).

Features 221, 216 and 212, all huts, face the street that forms the southern boundary of Block A. Features 221 and 216 were immediately adjacent to one another on a slightly southwest/northeast line, with only 63 cm (2 feet) of separation. Feature 212 was located 4.38 m (14 feet) to the east and slightly south of Feature 216. All three are oriented with their front slightly east of south, assuming that the end of the hut opposite the chimney was considered the front. Three large pits, Features 425, 210 and 215, were located in a line parallel to and just south of the huts. The southern edge of Block A is assumed to have been located just south of these pits. One feature is located just south of Feature 210 which would have put it within the street forming the southern boundary. However, this feature (209) appeared to be a tree from the surface and was not excavated. The tree may have been removed when the camp was cleared or could have grown after the camp was abandoned.

The next block to the south, Block B, was approximately 22.5 m (74 feet) away. A few pits and scattered posts were located between Blocks A and B, but no evidence of a structure was noted. The only structure located within Block B was a potential Sibley tent represented by Feature 372D, a shallow, curved trench that may have been used to secure the stockaded walls of the tent. The void immediately west of Feature 372D may mark the location of the tent as much as anything, given the number and proximity of surrounding features. Feature 355, a small slit trench, would have been located inside the tent assuming the standard diameter of 18 feet for a Sibley. It is likely that the slit trench was in use after the tent had been removed.



Figure 97. The approximate boundaries of the four activity areas.

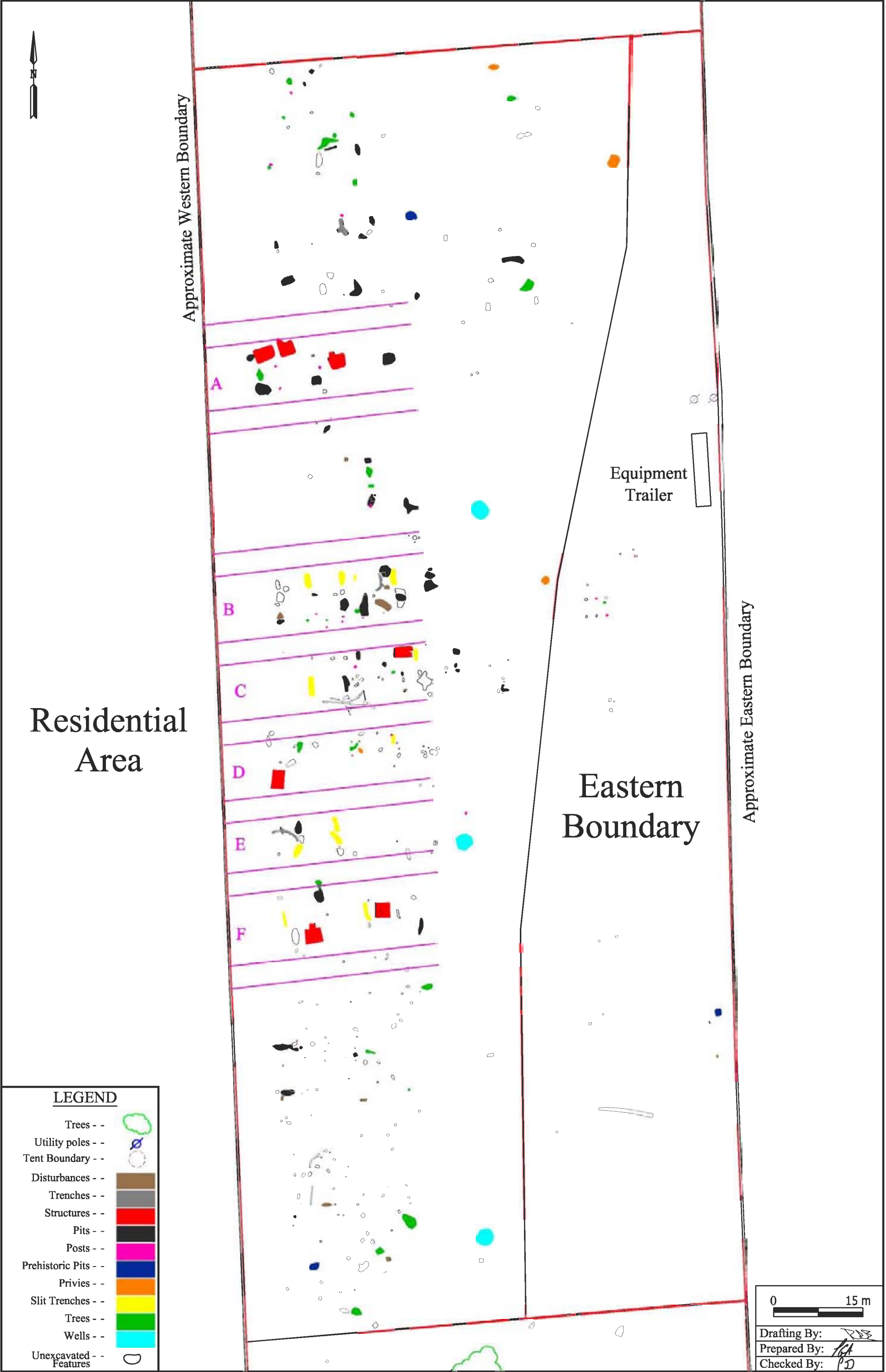


Figure 98. Company streets and blocks.

The interior of Block B was covered by a dense concentration of features. Two slit trenches (Features 356 and 361) were located immediately to the west of the hypothetical edge of the tent while a third (Feature 372B) was located approximately 1.9 m to the east. The slit trenches were oriented with their long axes north/south and were arrayed in an east/west line, probably on the edge of the street. At least nine large pits were located around the tent. Feature 373, a large circular pit, was located immediately adjacent to the east side of the tent, between it and Feature 372B, while another long, irregular pit (Feature 348) was located to the south. This pit may have encroached on the southern boundary of the tent, so it is possible that it was excavated after the tent was removed. Three irregular pits of varying size, Features 376, 377 and 378, were arranged in a north/south line approximately 7.5 m (24.6 feet) east of the tent near the presumed eastern end of the street. Block B was approximately 10.3 m wide.

Block C was approximately 11.25m wide. One rectangular hut (Feature 85) apparently fronted on the street dividing Block B and C, although the entryway was in the east end. Feature 86, a small slit trench, was located immediately east of the hut. It likely post dates the use of the hut, as it was literally right outside the door. One other slit trench (Feature 279) was located within Block C, but was approximately 14 m (45.9 feet) southwest of Feature 85. While not associated with an obvious structure, Feature 279 was just northwest of an arrangement of ditches that could mark the location of a structure. Feature 280 consisted of a long, narrow ditch running east/west, with a curved extension branching to the north and another to the south. These curved portions could have provided drainage around Sibley tents, but no other evidence in the area suggests this. It is more likely that this series of ditches was excavated merely to improve the drainage of this portion of the camp.

Another narrow area without features just south of Feature 280 represents the street dividing Blocks C and D. No structural features were located along this street, but a small slit trench with possibly associated posts (Features 272, A and B) was excavated along the southern edge. Feature 261, a small privy, was located in Block D, approximately 10.6 m (35 feet) northeast of Feature 93. Feature 93 represents the only structure located in Block D and was unusual in that it apparently faced east along the streets rather than south. Block D was approximately 10m wide and exhibited numerous tree disturbances and deep plow scars.

Block E was approximately 10m wide and contained a number of significant features, including a Sibley tent stand and three associated slit trenches. The tent is marked by Feature 236, a long, narrow, curving trench and probably fronted on the street north of the block. One slit trench, Feature 239, would have encroached on the tent, so likely post dates its removal. The other two slit trenches (Features 242 and 248) were located in a north/south line relative to each other approximately 5 m (16.4 feet) northeast of the tent. A large pit, Feature 247, was located adjacent to the northeastern edge of the tent. Feature 502, the middle well, is located at what appears to be the end of this block.

Block F contained large, significant features, including two huts (Features 95 and 223), two slit trenches (Features 98 and 100) and pits (Features 225 and 236). Feature 223,

which fronted on the street which formed the southern boundary of the block, was the largest of the square huts and was discussed in detail previously in this chapter. A narrow north/south oriented slit trench (Feature 100) was located approximately 2.5 m (8 feet) northwest of the hut. A large pit (Feature 236) was located approximately 3.1 m (10.2 feet) directly north of Feature 223, which places it on the southern edge of the street on the northern edge of the block. Another large, oblong feature (Feature 224) was located less than a meter from the western wall of the hut, but was not excavated. Based on the surface morphology, Feature 224 may have been another slit trench. Feature 95 was located approximately 7.5 m (24.6 feet) northeast of Feature 223. Feature 95 was also discussed previously in this chapter and will be again in Chapter 6, which details the removal of the burial. A large slit trench (Feature 98) was located less than a meter from the western wall of Feature 95. A narrow oblong pit was excavated 4.4 m (14.4 feet) southeast of the hut.

One other structure was recorded within the Residential Area that has no apparent relationship to a company street. Feature 449 is a curved trench that was probably used for a Sibley tent. Two pits (Features 343 and 450), a possible pit (Feature 344) and a post (Feature 449A) correspond to the perimeter of the tent. The was probably a structural part of the tent wall, while the pits may indicate that the trench for the wall of the tent was enlarged and used for refuse disposal after the tent was removed. While there are numerous features scattered around the tent, there is no obvious pattern to them that would indicate a company street.

South of Block F, there is no further evidence of any structures and no apparent pattern to the location of the recorded features. This area was recently covered by planted pine trees and was cleared using heavy equipment prior to the Phase II testing of the site. It is possible that this level of disturbance was sufficient to obliterate shallow features like those that mark Sibley tent stands. This may account for the lack of structures, but this seems doubtful given the lack of large enough voids in the feature distribution and the presence of other relatively shallow ditches. Numerous tree-related features were recorded, six of which were excavated. Four pits were excavated along with two prehistoric pits and one post. The most significant feature in this area was Feature 493, the southern-most well. The presence of the well is why this area has been included within the Residential Area. From street forming the southern boundary of Block F, this portion of the area extends 52.5 m (172 feet) to the south and the beginning of the Southern Perimeter, where the frequency of features drops dramatically.

While not directly tied to a specific company street, the wells were certainly placed for the convenience of the troops living on them. The northern-most well, Feature 518, was located between Blocks A and B and was likely used by the soldiers housed in Blocks A, B and C, as well as those from the lone Sibley tent to the north. Feature 502, located 43.75 m (143.5 feet) south of Feature 518, probably served Blocks D, E and F. The location of Feature 493 52.5 m (172.2 feet) south of Feature 502 and over 46 m (151 feet) southeast of the nearest known structure is puzzling. It is possible that this well was placed to water stock rather than men or, that other structures were located south and west of Block F but were outside the current project area.

The locations of the privies also seem to have been selected for the convenience of the men. Feature 532 was located approximately 35 m (115 feet) northeast of the northernmost Sibley tent, and 45 m (147.6 feet) northwest of the huts within Block A. As no slit trenches were recorded north of Block B, it seems likely that this privy served the very northern end of the camp. Another smaller privy, Feature 535, was located 20 m (65.6 feet) northwest of Feature 532. It may also have been used by the inhabitants of the northern tent, but it also likely served the men from Feature 540, which appears to have been a guard house and will be discussed as part of the Northern Perimeter. The southernmost privy, Feature 514, was located 58.75 m (192.75 feet) south of Feature 532, and 22.5 m (74 feet) east of Feature 372d, which was a Sibley tent. Block B contained three slit trenches, which may have been used prior to the construction of the privy or after it was filled.

The Northern Perimeter extends from just north of Features 467, 470 and 535 to the northern project boundary and from the eastern to the western project boundary, encompassing an area of 1.8 acres. Only nine features (2.0%) were recorded in this area, six of which were excavated. One specific activity area was noted within the Northern Perimeter, consisting of a large structure (Feature 540) and two pits (Features 151 and 539). Feature 540, described in detail previously in this chapter, was a large rectangular structure oriented northwest/southeast. It was the northernmost structure and the largest. Feature 151 was located east of the structure, but its function is unclear. It contained both prehistoric and historic artifacts and had intact roots near the base. It is unknown whether or not it was a pit that was impacted by tree growth or simply a planted tree. Feature 539, located south of 151, was apparently utilized as a refuse pit and possibly as a place to dump burned material from a stove.

Based on its location, the lack of features around it, its size and form, Feature 540 has been interpreted as a guard house rather than a dwelling. Its location in the Northern Perimeter makes sense in that it would have provided security for the camp. It does not appear to be a dwelling as it is much larger than the other huts and not associated with any other structures or streets. It appears that the entire Northern Perimeter was kept clear of obstructions, allowing the guards to see any oncoming threats and providing a clear field of fire if necessary.

The area designated as the Eastern Boundary appears to have been exactly that, the boundary around the eastern end of the camp. This area extends from the Northern Perimeter to the Southern Perimeter and from a northeast/southwest line created by Features 532, 514 and 493 and east to the eastern project boundary. The eastern edge of the project area coincides with the upper edge of a steep slope west of Pye Branch, which provided a natural limit to the camp's eastern expansion. This area encompasses approximately 1.5 acres and contained only 21 features. The features occurred in small clusters or were widely scattered. Feature 513 consisted of two rows of three post holes each, which suggests that it was a small animal pen or similar structure. It was located southeast of Feature 514. This area appears to have been kept clear and may have served as a travel route into and out of the camp.

The Southern Perimeter encompassed the entire project area south of an east/west line created by Features 465, 492 and 493. Thirty-eight features were recorded in this 2.4 acre area. The features were widely scattered, but two distinct concentrations were noted. The first cluster includes a large slit trench (Feature 4), two pits (Features 552 and 553) and Feature 2, which appeared to be a small pit but was not excavated. With no structures nearby and very few other features, the location of Feature 4 is somewhat puzzling. It may be that some activity area that left no subsurface trace was located in this area and a slit trench was needed. As it is located within the Southern Perimeter, which was probably part of the security surrounding the stockade, it may have been a sentry post. The contents of Features 552 and 553 provide another possibility. Each of these features included smaller pits that were deeper than the surrounding feature. Within these pits, dense concentrations of animal bone were encountered. In Feature 553, large portions of non-food parts, such as skulls and vertebra were recovered. This may indicate that butchering or processing of livestock took place in this area.

The second concentration of features within the Southern Perimeter is much more difficult to interpret. Located in the extreme southeastern corner of the project area, two long trenches (Features 485 and 486) and two pits (Features 479 and 484) were excavated along with three probable tree disturbances. A portion of two other possible pits was exposed, but neither was excavated. Feature 485, the northern-most trench, extended in a north/south direction before turning to the east and into the limit of the excavation. Feature 486 began approximately 5 meters south of Feature 485 and continued to the south. This trench was much narrower than Feature 485, but widened toward its southern end. The function of this cluster and the features within it is still unclear.

Discussion

The analysis of the spatial relationships of the features at Florence has provided insights into several aspects of the camp that history has failed to record. It should be clear from the above description of the structural features and those clustered around them that the camp at Florence was not laid out in regular military fashion, although some effort had been made to do so. The regulations called for each street to be a minimum of five paces, or 12.5 feet wide, with two paces, or five feet between each rank and file. While it is not possible to establish a precise width for each of the streets at Florence, it appears that the streets were close to regulation at slightly under 12.5 feet. As for the spacing around the shelters, there is no regularity in the Florence camp. Only Features 221 and 216 were immediately adjacent to one another, but were only three feet apart. The rest of the structures were either widely spaced or were the only structure identified in a given block.

The spacing issue points to another variable in the layout of a camp. It was allowable to have only one row of shelters per file if this was more practical than the standard double file due to terrain or low numbers of men. No doubling of structures was noted on any of the streets at Florence. As ample space was available, this likely reflects the low numbers of men often found in veteran units late in the war or in under-manned reserve units such as those assigned to guard the stockade.

The placement of slit trenches within the camp and even adjacent to some structures was a major breach of procedure. It had been well understood since the American Revolution that a crowded camp with insufficient sanitary facilities was a breeding ground for disease. For this reason, army regulations called for these facilities to be well away from the main camp (USWD 1861, CSWD 1863). Their location near or even adjacent to the streets is also unusual as regulations allowed at least some modicum of privacy to be accorded to those using the facilities with brush bowers or other obstructions. The slit trenches may have had some form of screening, but their location within the blocks and on the streets would have made it nearly impossible to completely block them from view. While the privies at Florence were generally located further from the structures, the farthest away was only 136 feet (54 paces) from the nearest structure, well short of the 100 to 150 paces (250-375 feet) called for by army regulations (USWD 1861, CSWD 1863).

Another factor that must be considered when interpreting the layout of the camp is the fact that it was a dynamic environment, with the numbers of guards present changing, different equipment arriving and the seasons changing. The very short time period that the camp was occupied makes this even more complex. In spite of this, the spatial analysis of the features, in conjunction with historical research, provides some information concerning the changing landscape of the camp through time.

On October 13, 1864, Second Lieutenant Thomas J. Eccles of the 3rd (Gill's) Battalion of South Carolina Reserves wrote in a letter to his hometown newspaper that his battalion, newly arrived in Florence, was without tents. Eccles would continue his letters throughout his stay at Florence. By October 18, he wrote, "...I seat myself on the pine straw in my tent, to write you a few lines". On November 4, with the weather turning for the worse, he wrote:

We have managed to get two tents to each company in the battalion, one for the officers, and the other a sort of refuge for the sick-but those who have not the industry and skill to construct cabins, are still uncomfortably confined to their earthworks, composed of poles crossed transversely over forks, covered with pine brush, and this with dirt-rather a muddy substitute for lime and mortar.

One week later, he provided another description of the types and methods of housing being used by then:

...the men have constructed for themselves as comfortable camps as circumstances allow, being without plank or nails. Some, who were able, have bought cloth and made themselves tents, in which they can keep dry...

Finally, on January 27, 1865, Eccles indicated that:

...those who have been looking for a removal, now express a willingness to remain until the winter is over, as they are generally well provided with comfortable cabins, or tents, with chimnies attached.

Eccles' account demonstrates the changing nature of the housing available to the guards and provides a suggestion of what might be seen archaeologically. It is not assumed here that the features that were investigated during this project are the remains of any of the structures discussed by Eccles. However, it would seem that many of the troops stationed at Florence would have gone through much the same process, creating much the same archaeological signature. Based solely on the locations of the structures, there is no indication that one feature pre-dates another. While Eccles indicated that tents, probably Sibley's, were used early in his unit's time at Florence, he also states that they were used later as well. In none of the blocks investigated were a Sibley tent and a hut located on the same street. However, the presence of slit trenches and other pits that would have intruded on the boundaries of a tent indicate that the area was still inhabited after the tent was struck. While this may suggest that the tents were used earlier, it may simply mean that they ceased to be used before the camp was abandoned.

CHAPTER 5. MATERIAL CULTURE

The study of the artifacts from the camp at Florence has provided valuable information on the equipment issued to the soldiers and the other materials available to them. In all, 5828 artifacts were recovered. A detailed inventory of the materials recovered is included as Appendix B. The following chapter presents a discussion of the overall assemblage using South's (1977) functional groups as a frame work. This is followed by an examination of the artifacts as they relate to feature types and a discussion of how specific types of artifacts were distributed across the site and what that may indicate about the function of the features.

Architectural Group

Materials from the Architectural Group were the most frequent, with 2242 artifacts recovered which accounted for 38.5 percent of the total assemblage. Architectural materials included nails, brick fragments, flat glass and asbestos floor tiles. Three fragments of the floor tiles were recovered from disturbed contexts on the surfaces of the features and are likely derived from the dumping of materials near the site by the adjacent State facility.

Nails were the most commonly recovered architectural artifact, accounting for 89 percent (n=1994) of the architectural assemblage and 34.2 percent of the overall assemblage. By far the most common type of nail recovered was cut nails (n=1955), which were the preferred type during the Civil War period. One partial and one complete wrought nail were recovered. While wrought nails were largely replaced by cut nails early in 19th century, they were still used into the mid 19th century in applications that required the nail to be clinched, such as in door construction. It is also possible that they were recycled from older structures. The brittle material used to make cut nails caused them to break when clinched while the more ductile iron used for wrought nails allowed them to bend easily. Four wire nails were recovered, but these appeared to be intrusive from the plow zone, although they were available for specific applications as early as the 1850s (Avery 2002).

The vast majority (n=1867, 95.5%) of the cut nails were fragmentary, but 88 complete specimens were recovered, ranging in size from 4 penny to 16 penny. According to Walker (1971), the pennyweight of a nail dictates the type of construction for which it was used. For example, 4 penny nails were commonly used for roofing and interior moulding, 8 penny for flooring, 12 penny for framing and 16 penny for heavy framing. The context from which these nails were recovered may not allow for an accurate assessment on the basis of size. Writing from Florence on November 11, 1864. Lieutenant Eccles indicated that "...the men have constructed for themselves as comfortable camps as circumstances allow, being without plank or nails". If nails were in short supply, it is likely that the soldiers were recycling them from a wide variety of sources, including crates, sheds, fences or even standing houses. While the size may well indicate the original type of construction for which the nail was originally used, it can not account for secondary uses, especially in the absence of great numbers or a wide variety of sizes of nail.

Brick fragments were the next most common architectural artifact, with 232 individual fragments recovered, accounting for 10.3 percent of the assemblage. The size of the fragments varied widely from tiny bits to almost complete specimens. The bricks recovered weighed a total of 22.5 kilograms. All of the bricks that were identifiable as to method of manufacture were handmade. Bricks were generally made by hand on the site where they were intended to be used until the end of the 19th century. Bricks would have served many purposes in a Civil War era camp, such as hearth construction, as liners for privies or wells or to stabilize posts. The bricks at Florence were almost certainly recycled from other structures as so few were recovered given the large number of features excavated.

Only 13 flat glass fragments were recovered from the Florence camp, accounting for 0.6 percent of the architectural assemblage. All of the flat glass was assumed to be derived from windows. The primary method of determining the manufacture date of a flat glass fragment is through the use of a statistical regression formula that uses the thickness of the fragment in millimeters to produce an approximate calendar date (Moir 1987). This is based on the observation that flat glass increases at a predictable rate through time. Moir's (1987) formula does not apply to machine-made plate glass utilized after the beginning of the 20th century. The fragments recovered ranged in thickness from 1.01mm to 2.43mm, with an average of 1.63 mm. These measurements produce a range of manufacture dates from 1798 to 1917, with an average of 1850. Although the sample size is too small to be statistically significant, it does suggest that the flat glass recovered from the Florence camp was made prior to the occupation of the camp. The windows were apparently very scarce and were probably recycled from other structures.

Kitchen Group

The Kitchen Group was represented by 2067 artifacts, representing 35.5 percent of the total assemblage. The storage, preparation and consumption of foods are always important activities whether the site served a military or domestic function, which generally leads to a high frequency of kitchen related artifacts from either kind of site. The assemblage from Florence varies significantly from what would be expected at a domestic site, as the majority of the material used in the consumption of food was issued by the military and was closely curated by the soldier that used it. Likewise, cooking vessels were valuable commodities and would not have been disposed of if not irreparably broken. Therefore, the Kitchen assemblage from Florence consists primarily of storage containers, many for drink rather than food.

Container Glass

Container glass was the most common Kitchen artifact, with 1596 fragments or vessels recovered, which accounted for 77.2 percent of the assemblage. Recovered glass ranged in size from complete vessels to very small fragments. Glass was described by color as well as vessel part, vessel form, manufacturing technique, finish type and date range of manufacture as appropriate.

Although the color of container glass has limited analytical utility, it serves as a basic descriptor and means of sorting small fragments (Jones and Sullivan 1989). The color of a glass vessel is the result of impurities in the silica used in its production or in additional compounds added to the mix to produce a desired color. Iron present in the sand used for silica typically produces shades of green, but the color can range from aqua if the iron content is low to darker green if the content is high. The addition of different compounds can produce an extremely wide array of colors ranging from cobalt blue to amber to white. Colorless glass is made by adding compounds to the glass that counteract the color produced by the existing impurities in the mix. Manganese was commonly used for this purpose during the late 19th century and up to the beginning of World War I. During the war and until ca. 1930, selenium was used as a clarifying agent. Each of these substances produced a colorless glass, but were unstable when exposed to ultraviolet (UV) light. Glass containing manganese turns a pinkish or purple tint, collectively known as solarized amethyst, while selenium produces a light yellow color (Jones and Sullivan 1989). These inclusions make vessels from this period relatively easy to date. Other colors had discernable periods of popularity, but it is difficult to determine the date of manufacture of a vessel based solely on its color in most cases.

The majority of the glass fragments from the Florence camp were a shade of olive green in color, with 976 fragments recovered, accounting for 61.1 percent of the glass. Olive green is typically a result of the presence of iron oxide impurities found naturally in the sand used to produce the glass. Vessels typically found in olive green include liquor bottles, wine bottles, champagne bottles, beer/ale bottles, mineral water bottles, ink bottles and snuff bottles. Olive green was most popular during the mid 19th century and was used almost exclusively in liquor, wine and champagne bottles after the turn of the 20th century (Jones and Sullivan 1989, Lindsey 2007). Therefore, the high frequency of this color at the Florence camp is to be expected.

Other naturally occurring colors include aqua and blue-green. Aqua is the result of very low levels of iron in the sand and was found in glass vessels throughout the 19th and into the early 20th century. Aqua fragments accounted for 18.6 percent (n=297) of the glass recovered. Likewise, blue-green glass was produced from sand with slightly higher levels of iron and is common today. Two hundred and eleven fragments were recovered, accounting for 13.2 percent of the glass. Amber could also result from natural impurities, but was often intentionally produced by the addition of carbon into the glass mixture. It was used throughout the 19th century and is the most common color of bottle for beer today (Jones and Sullivan 1989, Lindsey 2007). Although commonly in use during the occupation of the camp at Florence, only 19 fragments (1.2%) were recovered. Seventy eight fragments of colorless glass were recovered, many of them from the upper strata of features where they were likely intrusive from the plow zone. One solarized amethyst fragment was recovered, which was also intrusive to the feature fill. Fourteen fragments could not be identified as to color due to severe burning.

The most common vessel form recovered was bottles of various types. Of the 1596 artifacts classified as container glass, 1188 (74.4%) were either complete, partial or

fragments of bottles. While the vessel form of the glass was generally determined by examination of morphological features such as the presence of a finish or base, presumed size of the vessel and curvature of fragments, all of the olive green fragments were classified as bottles even if no features were present. According to Lindsey (2007), bottle manufacturers were the primary users of the olive green color, so it is likely that these fragments were derived from bottles. Other vessel forms included panel bottles (n=48, 3.0%), jars (n=8, 0.5%), one medicinal vial fragment (0.1%) and one glass handle (0.1%), possibly from a mug. The form of the remaining 350 (21.9%) fragments could not be determined due to extremely small size or burning.

Five complete glass bottles were recovered, four of which were found in two of the wells. All of the bottles were olive green in color and held various types of beverages, probably all alcoholic. Two of the bottles were champagne-style, with one recovered from a well (Feature 518) and the other from Feature 215, which was a refuse pit. Champagne bottles typically have a deep push-up from the base into the body, with nearly vertical walls on the body. The body transitions seamlessly into the shoulders, which taper smoothly into a proportionally long, slender neck. The finish included a flat, reinforcing band of glass either applied to the neck or created using a finishing tool. Champagne bottles were produced in the United States as early as 1829, but many were imported from Europe. They were used not only for champagne or other sparkling wines, but also for other wines as well as beer. By the mid-19th century, most champagne bottles were still being produced by either free-blowing or in dip molds and the finish applied by hand. After about 1870, they were produced in turn-molds which produced a highly polished surface and obliterated the mold seams (Lindsey 2007, Jones and Sullivan 1989).

Both of the complete champagne bottles were apparently free-blown and measure approximately 10 inches (25.3 cm) in height (Figure 99). Each is slightly asymmetrical and neither is perfectly round. Both have deep push-up bases with large mamelons. The bottle from Feature 518 exhibits a bare-iron pontil scar while no scar is visible on the other bottle. The base of the bottle from Feature 215 is clearly not perfectly round and the sides of the body are not symmetrical, giving the bottle a distinct lean to one side. The bottle from Feature 518 is more rounded, but has an even more pronounced lean. The finish of both examples includes a snapped off lip that has been smoothed and polished and an applied flat band below the lip. The applied bands are very irregular. Stretch marks are clearly visible in the neck of the Feature 518 bottle (Lindsey 2007). The surface of the bottle from Feature 215 is somewhat dull and highly worn, while the Feature 518 bottle is worn only on the base and retains an overall glossy surface. This certainly reflects the differential deposition between a refuse pit (215) and a well (518).

One dip molded cylindrical spirit bottle was recovered from Feature 502 (Figure 100). It measured approximately 9.25 inches (23.5 cm) in height and was an extremely dark olive green (black) in color. The base has a moderately deep conical push-up with no mamelon and a scar from a glass-tipped pontil rod. The base and body are very dense, making the



Figure 99. Olive glass champagne-type bottles.



Figure 100. Dark olive glass wine bottle.

bottle heavy for its size. The body exhibits the rough texture typical of a dip mold and is slightly wider at the top than the base. There is a definite transition from the body to the shoulder as there is from the shoulder to the neck. The shoulders and neck have a smooth surface. The neck bulges out slightly before tapering to the finish. The finish is an applied mineral type, with the upper portion wider than the lower. According to Lindsey (2007), this type of bottle was used for various spirits, including ales and wine. The relatively tall form and the bulbous neck were popular during the early to mid 19th century.

The other two complete bottles were made using three-part, or Rickett's type molds. The three-part mold included a dip mold for the body and two upper halves that formed the shoulder and neck of the bottle. This type of mold left a distinctive horizontal scar around the bottle where the body meets the shoulder and two opposing vertical scars up the shoulders and usually up the neck to the finish. Three part molds were commonly used on liquor bottles from the 1820s until the late 19th century (Lindsey 2007, Jones and Sullivan 1989).

Although these two bottles were both made using a Rickett's mold and were recovered from the same feature (Feature 502), they were very different (Figure 101). The first was a short, squat form measuring 7.75 inches (19.8 cm) in height and an extremely dark olive green color. The base has a moderate, slightly rounded conical push-up with no apparent pontil scar. The body tapers out slightly from the base toward the shoulders, which are clearly marked by the horizontal mold seam. The vertical seams extend to the finish. The neck is slightly bulged, but almost straight. The finish is an applied mineral type with a wide, steeply flared lower portion. The bottle appears similar to early versions of the later squat cylinder spirit bottles described by Lindsey (2007). It may also have been used for ale or porters, but this is unclear. As an aside, this bottle was recovered from the base of the well and had been placed inside a stoneware vessel prior to being dumped. The mouth of the bottle was completely sealed with sand and the bottle contained water, which was saved for future analysis.

The remaining bottle is an example of a "Patent"-style spirit bottle, as described by Lindsey (2007). The name "Patent" refers to the fact that many examples have that word embossed on the shoulder, a reference to the original Rickett's bottles. The bottle recovered is dark olive green and measures approximately 10.625 inches (27.5 cm) in height. The base has a moderate push-up with a small mamelon and no apparent pontil scar. The actual base forms a flat ring around the push-up where the manufacturer's name is often embossed, although this example is unmarked. The body tapers out slightly from the base to the shoulders but is almost vertical. The horizontal seam that divides the shoulder from the body is visible but almost worn away in places. The vertical seams are pronounced on the shoulder, with a great deal of offset between the two sides of the mold. The seam extends up the neck to the finish. The neck has straight sides that taper toward the finish. The finish is an applied mineral finish with a rounded lower part and angled upper part. This type of bottle was manufactured between 1844 and 1880, but was most popular between the 1850s and 1870s.



Figure 101. Olive glass Rickett's type liquor bottles.

Fragments of container glass were partially classified by the portion of a vessel from which they derived, including the finish, neck, shoulder, body, base or combination thereof. Finishes for 31 separate vessels (not counting the complete bottles) were recovered in a variety of styles. The most common style recovered was the mineral finish (n=14), which was a very popular type during the mid 19th century. Many variants of the mineral finish were used, but the general form includes an upper portion that is relatively tall and tapers toward the lip, but may be almost vertical. A second shorter ring was located below the first and was typically angular and downwardly flared. The mineral finish was first used in the 1820s and continued into the 20th century on a wide variety of bottles (Lindsey 2007).

Four bottles with champagne finishes were identified, although one was broken into five pieces. The champagne finish was used on bottles containing champagne as well as wine, liquor and carbonated beverages such as beer and ale. This finish has been in continuous use since the early 19th century although the method of manufacture has changed considerably. The champagne finish is made by adding or forming a wide, flat ring of glass slightly below the lip of the bottle. This adds strength to the bottle and provides a lug for wiring down a cork. Before ca-1850, the finish was formed by adding the ring of glass (a laid-on finish) and later by adding additional glass that was then formed using a finishing tool. This technique was replaced when machines began to be used in bottle production in the early 20th century. All of the examples recovered from Florence appear to have laid-on finishes.

Three bottles with oil finishes were identified. The oil finish was composed of a single, tall part that tapers toward the lip of the bottle. It was used extensively from the 1830s until the 1920s, but was especially popular after 1850. It was found on a wide variety of bottles, including patent medicines, sauces, chemicals and some liquor bottles. According to Lindsey (2007), the oil finish was one of the most commonly used finishes on bitters bottles during from the mid 19th to the early 20th century.

Rolled or folded finishes were found on three bottles as well. The rolled finish is simply what it implies. The glass was rolled or folded down, usually into the bore of the bottle to form a smooth, rounded lip. This type was typically found on figural flasks, food, sauce, and medicine bottles as well as those with many other contents. It was most common during the early to mid 19th century (Lindsey 2007).

The remaining finishes included two examples each of bead, wide prescription and extract finishes, as well as one crown finish. The crown finish was not invented until the 1890s, so this is obviously an intrusive artifact. The bead finish was commonly used on medicine bottles and occasionally other types as well. In use from the late 18th to the 20th century, early versions were formed by rolling the glass outward to form the bead or by applying a thin bead of glass to the cracked-off neck. Later, it was formed using finishing tools and then made by machine. The wide prescription finish was found primarily on medicine bottles from the beginning of the 19th century through 1870. It consisted of a thin lip of glass pushed away from the bore to produce a round, flat lip. This type was also found on case gin bottles as early as the late 18th century. The prescription or patent finish was used primarily for patent medicine and extract bottles from the mid 19th to the early 20th century.

Originally formed by applying a band of glass to the neck and later by tooling and machine, the prescription finish consisted of a flat topped band of glass slightly wider than the neck of the bottle with squared sides (Lindsey 2007).

Another diagnostic attribute found on glass container fragments at the Florence camp was embossing. The total number of embossed glass fragments recovered was 39, with 32 fragments accounting for no more than 7 vessels. Embossing involves the addition of letters, numbers or symbols to a glass vessel by engraving the negative image of the desired character on the inner wall of the mold. This technique dates to the early 19th century in the United States, but was used as early as the mid 18th century in England. As the need for glass vessels increased, many of the major glass producers embossed their name or maker's marks onto vessels, while consumers of glass often requested that their company or product name be embossed as well. Embossing appears on all types of bottles throughout the 19th century and into the early 20th century when it ended with the advent of machine production of bottles (Jones and Sullivan 1989, Lindsey 2007).

Four of the vessels represented were apparently used for medicinal preparations and two of these have been identified. Nine fragments of an aqua panel bottle were recovered from Feature 376. One side panel was embossed with the word "VEGETABLE" while the opposite side panel was likewise marked "PAINKILLER". While neither panel was complete, enough of the lettering was recovered to infer these markings with confidence. This bottle apparently contained a preparation called Perry Davis' Vegetable Painkiller that was patented in 1845. Perry Davis of Pawtuxet, Rhode Island, invented his medicine in the early 1840s in an effort to heal himself of digestive problems. When it worked, he decided to sell it commercially, so he purchased a factory in Providence, Rhode Island, and started production in 1844. The medicine was apparently a mixture of opiates and ethyl alcohol and was intended to ease pain brought on by any number of ailments. Missionaries traveling to Asia often took cases of the Vegetable Painkiller along to help ailing natives. In 1861, the U.S. government commandeered Davis' factory to produce the medicine for its troops as well as horses. Davis' Vegetable Painkiller continued to be produced until the early 20th century (Brown 1990).

Four embossed fragments of another aqua panel bottle were recovered from Feature 518. This example was marked "BURNETT" on one side panel and "BOSTON" on the opposite side, although the "B" in Boston was missing. This mark is attributed to Joseph Burnett and Company of Boston, Massachusetts which produced a number of medicinal and personal grooming products between the mid 19th and early 20th century. Their most widely distributed product was known as Burnett's Cocaine, which was a coconut oil-based hair dressing that an 1859 advertisement claimed:

It prevents the hair from falling off.
It promotes its healthy and vigorous growth.
It is not greasy or sticky.
It leaves no disagreeable odor.
It softens the hair when hard or dry.
It soothes the irritated scalp skin.

*It affords the richest luster.
It remains longest in effect.
It costs fifty cents for a half-pint bottle.*

While the bottle recovered at Florence can not be positively attributed to Burnett's Cocoaine as opposed to any of that company's other preparations, it seems likely as the hair treatment was their most popular product (Digger Odell Publications 2007, Fadely 2007).

Two olive liquor bottles, each with the word "PATENT" embossed on the shoulder were identified. Bottles produced using a Rickett's mold were often marked in this manner. In fact, Rickett's mold bottles were one of the earliest types to be embossed, as a plate was used to form the base that could easily be changed. One of these bottles, recovered from Feature 518, included the complete base which was embossed "H. HEYE/BREMEN". Toulouse (1971:177) mentions Hermann Heye and Company of Bremen, Germany as suppliers of beer bottles to E. and J. Burke of Dublin, Ireland and Liverpool, England, but provides no further information. Based on the mold seams that extend up the necks of these bottles, they likely date between 1840 and the 1880s (Lindsey 2007).

Two other medicinal bottles were also recovered, but could not be affiliated with a company or product. Four fragments of the body of a light bluegreen bottle were recovered from Feature 223. The bottle had been embossed with the words "DRUGGISTS/AUGUSTA, GA". Neither of these words was complete and it is not known if other words were present. A brief search for druggists in Augusta, Georgia during the Civil War revealed that there were many. No examples of bottles matching this specimen were located. The bottle was manufactured using a cup mold and was embossed using a plate, which left clear seams on the bottle. Cup molds were not used until the 1860s, while plate embossing was generally not used after the 1870s, dating the bottle to this period (Lindsey 2007).

A major portion of the other medicine bottle was recovered. It was a small, aqua panel bottle embossed on both side panels and the front panel. The only legible word is on one side panel which had "PHILAD^a" (the superscript 'A' was capitalized and underlined), an abbreviation for Philadelphia. The remaining words were fragmentary and no complete words could be inferred from them. The opposite panel from the one above likely had the company name while the product name was probably on the front panel. One of the words on the front panel may have been "INFANT", but this is not clear.

The only other embossed vessel with legible words was an olive bottle base marked "PITTSBURGH". This word was not complete and the letters "Co", probably for Company, immediately preceded it. This information was not enough to locate the maker of the bottle.

Ceramics

The remains of ceramic vessels represent the majority of the remaining Kitchen Group artifacts. The total number of sherds recovered was 452, which accounted for 21.9 percent

of the Kitchen assemblage. These sherds ranged in size from tiny fragments recovered from flotation samples to complete vessels. Utilitarian wares made up the majority of the ceramics, while very few examples of refined wares were recovered. Given the military function of the camp, it is not surprising that few plates or teacups were available.

The most common ceramic type was stoneware, with 319 sherds recovered. The majority of the stoneware was alkaline glazed, with 280 sherds recovered. Other types of stoneware included salt glazed (n=26), slip glazed (n=6), Bristol glazed (n=3), blue broadline (n=1) and three sherds that were unglazed or too eroded for the type to be determined. Three complete ginger beer bottles accounted for all of the Bristol glazed stoneware (Figure 102).



Figure 102. Stoneware beer bottles.

Alkaline glazes consisted of a mixture of ash or lime, a silica source, usually sand, crushed glass or feldspar, clay and water. The ash or lime is the alkaline substance, which acted as flux to lower the melting temperature of the glaze. The silica produced the glassy surface associated with this technology while the clay bound the glaze to the vessel. The use of alkaline glazes was known in China as early as 206 B.C., but was not used in North

America until the beginning of the 19th century. Alkaline glazes are usually highly lustrous and light green or brown in color depending on the amount of iron in the body of the pot, other impurities present in the clay, the oxygen level in the kiln and the firing temperature (Baldwin 1993, Zug 1986).

The centers of production for alkaline glazed stonewares in the 19th century were located in the Edgefield District of South Carolina, the Piedmont of Georgia and the Catawba region of North Carolina. The Edgefield District existed as a judicial district from 1800 until 1868 and included all of modern Edgefield County as well as parts of Aiken, Saluda, McCormick and Greenwood Counties. Located in western South Carolina across the Savannah River from Augusta, Georgia, the Edgefield District was well situated to become an important stoneware production center. A band of high quality clay with a relatively high kaolin content runs through the area, which led English potters to try importing it, although it proved too costly. The excellent clay, a ready source of sand and firewood along with access to markets through the Savannah River combined to create ideal conditions for stoneware production (Baldwin 1993, Zug 1986).

How ancient Chinese technology found its way to western South Carolina is unclear. The most likely explanation seems to be that the use of alkaline glazes was recognized during the effort by English potters to produce porcelain comparable to that imported from China. Letters written by missionaries to China in the early 18th century described the process and ingredient used by Chinese potters. When William Cookworthy, an English potter, read the missionaries' account, he attempted to duplicate the Chinese porcelain and was successful to a degree. While he was not producing stoneware, he did reveal the use of an alkaline agent (lime and fern ash in his case) as key for the glaze. A friend of Cookworthy, Richard Champion, moved to Camden, South Carolina in 1784. Champion was well acquainted with Cookworthy's experiments, but there is no evidence to suggest that he produced pottery after arriving in South Carolina (Zug 1986). It may be that one of the potters in South Carolina read the same accounts and arrived at the glaze on their own. The Edgefield potters were typically the elite of South Carolina, owning large plantations and manufacturing pottery as a side business. Given their economic status, it is probable that they had ready access to the published records as well (Baldwin 1993, Zug 1986).

One such potter was Abner Landrum, who was also a physician, newspaper publisher and land speculator. His Pottersville Stoneware Manufactory was founded in 1810, becoming the first stoneware factory in the Edgefield District. According to Baldwin (1993:19), Landrum is probably the person who introduced alkaline glazed stoneware to South Carolina. With the completion of the South Carolina Railroad from Charleston to Hamburg in the 1830s, new markets were opened spurring new growth in the industry. By the 1850s, there were six ceramic factories in the Edgefield District, all producing alkaline glazed stoneware (Baldwin 1993). Given the proximity of Florence to the Edgefield District and the almost direct rail connection between the two, it is little surprise that the ceramic assemblage was dominated by alkaline glazed stonewares.

Although Edgefield stonewares were produced in a number of vessel forms, such as jugs, jars, crocks and pan, this variety is not reflected in the assemblage from Florence.

Approximately 75.7 percent (n=212) of the sherds were apparently derived from jugs of varying size, while only one sherd was from a crock. The remaining 67 sherds (23.9%) could not be identified as to vessel type. The presence of these vessels indicates that the troops were obtaining food and drink from a supply depot as well as the surrounding community, as it is unlikely that the army would have carried heavy stoneware vessels around with it. The small number of vessel forms may indicate that the goods being bought were packaged in a similar manner or that jugs were the most readily available container at that time. However, this apparent lack of diversity may be artificial as it can be extremely difficult to determine vessel types based on small, common body sherds.

The most likely explanation for the low number of different forms is that relatively few vessels are actually represented by the recovered sherds. As an example, 162 sherds were collected from one vessel. Rims, finishes and bases were utilized in determining the minimum vessel count, along with surface texture, vessel shape and glaze color to a lesser degree. While some body sherds could be directly associated with a finish or base and therefore a specific vessel, it was much more difficult to determine that a given sherd was not part of particular vessel. For this reason, body sherds rarely contributed to the minimum vessel count. Based on these criteria, a minimum of 11 alkaline glazed stoneware vessels are represented by the sherds recovered. At least four salt glazed stoneware vessels, three Bristol glazed bottles and one brown slip glazed bottle were also recovered.

Vessels from the Edgefield District were often marked with the maker's name or mark as well as the capacity of the vessel using a stamp or a slip of either white kaolin clay or a dark brown iron slip. Less often, they were decorated using either or both of the same slips. Decorative motifs were generally simple curls or flowers, but could be elaborate, even including stylized images of people, depending on the painter's skill (Baldwin 1993). Three decorated vessels and one marked vessel were identified from the Florence assemblage.

The decorated vessels were probably the work of Thomas Chandler, who began producing stoneware at the Trapp-Chandler Factory during the early 1840s. By 1850, Chandler had opened his own factory, employing eleven journeyman and slave potters. His factory produced pans, pitchers, jugs, jars and chamber pots using a smooth, feldspathic glaze that ranged in color from tan to grayish green to bluegreen (Baldwin 1993). According to J. W. Joseph (Pers. Comm. 2007), Chandler was well known for his use of white slip trail decorations, often applied by female slaves. The vessels recovered from Florence include a small, nearly complete ovoid jug decorated with a floral motif (Figure 103) and two large jugs that exhibit a row of curlicues across the vessel (Figure 104). Approximately 15 to 20 percent of one jug was recovered while the third vessel was represented by only one large sherd. Joseph (Pers. Comm. 2007) examined a photograph of the floral motif and stated that it was known as the "broken flower" and was typical of Chandler's work. Chandler sold his business in 1852 due to failing health, which provides a date range for these pieces of ca. 1840 to 1852 (Baldwin 1993).



Figure 103. Stoneware Chandler jug, with “broken flower” motif.



Figure 104. Portions of two stoneware Chandler jugs. The larger reconstruction was recovered from Feature 425.

The marked vessel was a jug with a dark, greenish brown alkaline glaze and a large diameter finish (Figure 105). The initials “DS” were stamped into the shoulder of the jug, with a Roman numeral “I” immediately below, marking this as a one gallon jug. This was the mark of Daniel Seagle, an early stoneware maker from the Catawba region of North Carolina. According to Zug (1986:84-85), Seagle was a prolific potter who was one of the first to mark his wares. The date of his entry into the ceramic business is not known, but he began as an earthenware potter before switching to stoneware sometime before 1850. He was known for well-made vessels that were “evenly turned, thin walled, bulbous and enhanced by large, carefully pulled handles and well-melted green or brown glazes” (Zug 1986:85). He was also known for producing large vessels, some over 15 gallons in capacity, and was one of the first to use melted glass to accent and strengthen his pieces.



Figure 105. Marked stoneware sherd made by Daniel Seagle of Catawba, North Carolina.

A wide variety of refined ceramics was recovered, although the number of sherds was relatively low (n=133). The refined wares were dominated by cream-colored ware (CC ware), with 77 sherds recovered. Other refined types included ironstone (n=25), hotel ware (n=20), porcelain (n=6) and one sherd each of pearlware, refined redware, yellowware and delft. The hotel ware was recovered primarily from the surface and reflects the institutional use of the property adjoining the project area.

Archaeologists have classified refined earthenwares chronologically by their glaze color for many years. Creamware, popular during the last half of the 18th century was replaced by pearlware in the late 18th century before being replaced by whiteware in the early to mid 19th century. There are two major problems with this method of classification. The first is that the color of a given glaze is very subjective. A sample of sherds may be divided into ware classifications very differently by different archaeologists. The second problem is that the people who made, sold and used the ceramics did not use these terms to describe them, giving them no basis in history (Miller 1980).

In 1980, George Miller proposed that ceramics should be classified based on decorative technique rather than glaze color. According to Miller (1980:1), "Using a classification based on decoration will achieve two things: an ability to integrate archaeological data with historical data and establishment of a more consistent classification system than is now possible using ware types". His research included the examination of price lists of various potters from the late 18th through the mid 19th century, which illustrated that they referred to their goods by decorative type. As for the paste of the vessel, Miller (1980) used the term cream-colored ware (CC ware) to describe the majority of the refined earthenwares of the 19th century. He contended that the paste color lay on a continuum beginning with late 18th century creamware through the 19th century and well into the 20th century. Garrow (1982) refined this approach by adding the color of the paste as an analytical element to provide a tighter chronology. In addition, Garrow (1982) integrated Miller's (1980) descriptions of various decorative techniques with those of Noel-Hume (1978) and South (1977) to further refine the date ranges of the popularity of a given design.

Refined earthenware sherds were typed by decoration following Miller (1980) as modified by Garrow (1982). Decorative types included transfer printed (n=17), edged (n=16), dipped (n=6), sponged (n=5) and indeterminate (n=32) (Figure 106). The indeterminate category includes sherds that lacked decoration but were either very small or from a vessel part not typically decorated. It was not assumed that an undecorated sherd was derived from an undecorated vessel. By the 1860s, edged wares, which includes blue and green shell edge, were waning in popularity and had become as inexpensive as undecorated CC ware. Sponge decorated types were valued approximately the same as undecorated and edged types. Dipped vessels, which included annular and mocha types, were only slightly more expensive. Transfer printing appears to have been very popular by this time, but was only slightly more expensive (Miller 1980).

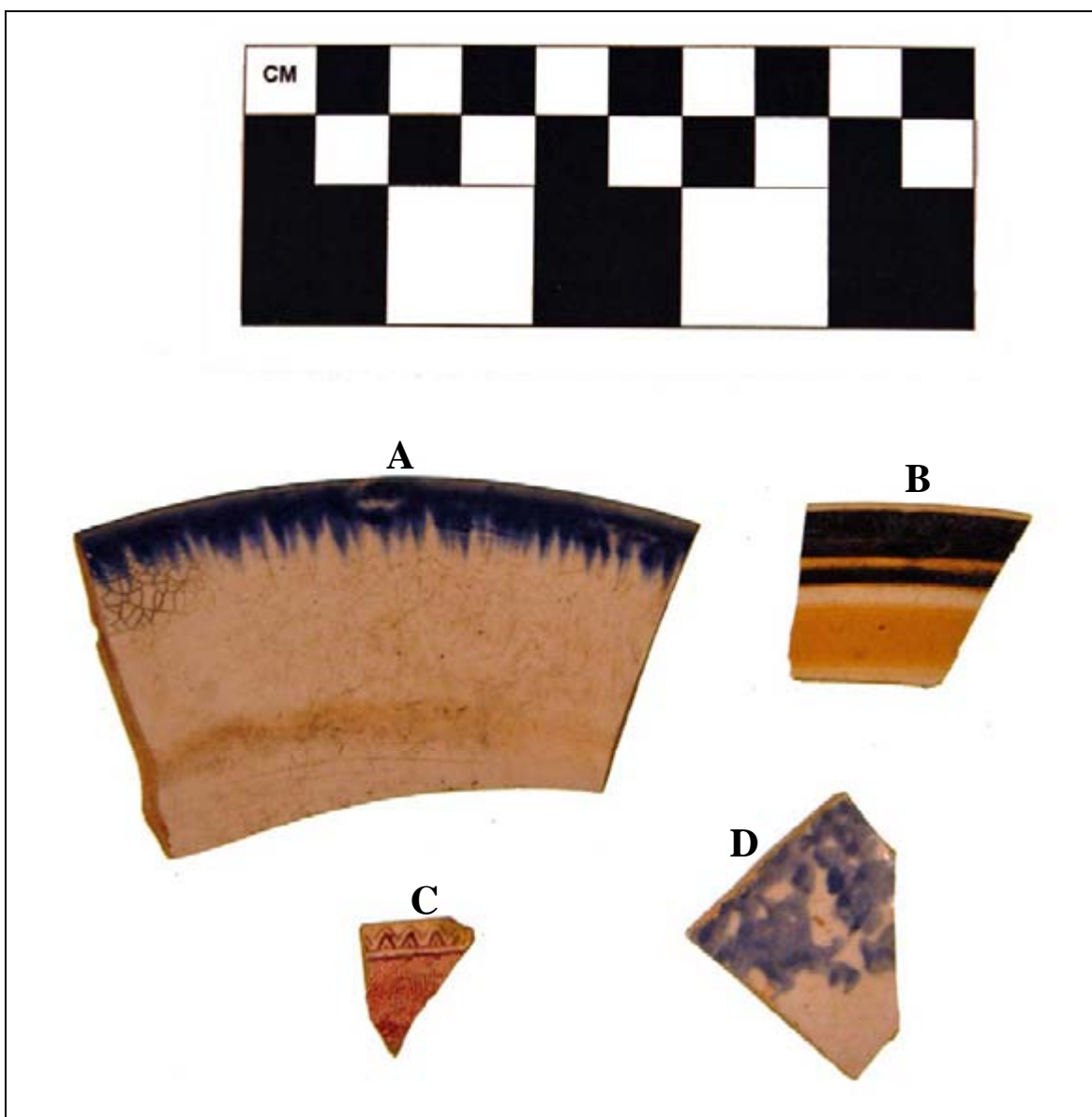


Figure 106. Examples of refined earthenwares: A) blue shell-edge, B) banded annular, C) red transfer print, and D) blue sponge.

It is not surprising that the refined ceramics from the camp at Florence Stockade appear to be composed of less expensive types, as it is likely that these vessels were either brought from home by the soldiers or into the camp by local citizens bringing goods to the troops. The majority of the sherds recovered appear to be derived from plates, which were more likely to have been brought by a citizen than to have been carried by a soldier. No minimum vessel count was attempted as the assemblage was small and many of the sherds very small and non-diagnostic. However, approximately one half of a blue transfer printed plate (in four fragments) (Figure 107) and a large portion of a small undecorated ironstone plate were recovered.



Figure 107. Reconstructed blue transfer printed plate recovered from Feature 493.

Kitchenware

Kitchenware consists of those things used to store, prepare or consume food that are not glass containers or ceramic vessels. This category included 20 metal artifacts representing tin cans, utensils and cooking vessels (Figure 108). One nearly complete tin can and six fragments of another were recovered. Both were made of thin, tin coated sheet iron. Although hundreds of fragments of similar material were recovered, the majority could not be identified as to form. Utensils included two forks, one three and one four tine, an iron spoon bowl and a pewter spoon bowl, which had a seashell motif at the attachment point of the handle. A folding corkscrew was also recovered, which was not surprising given the high number of bottle fragments discussed previously.

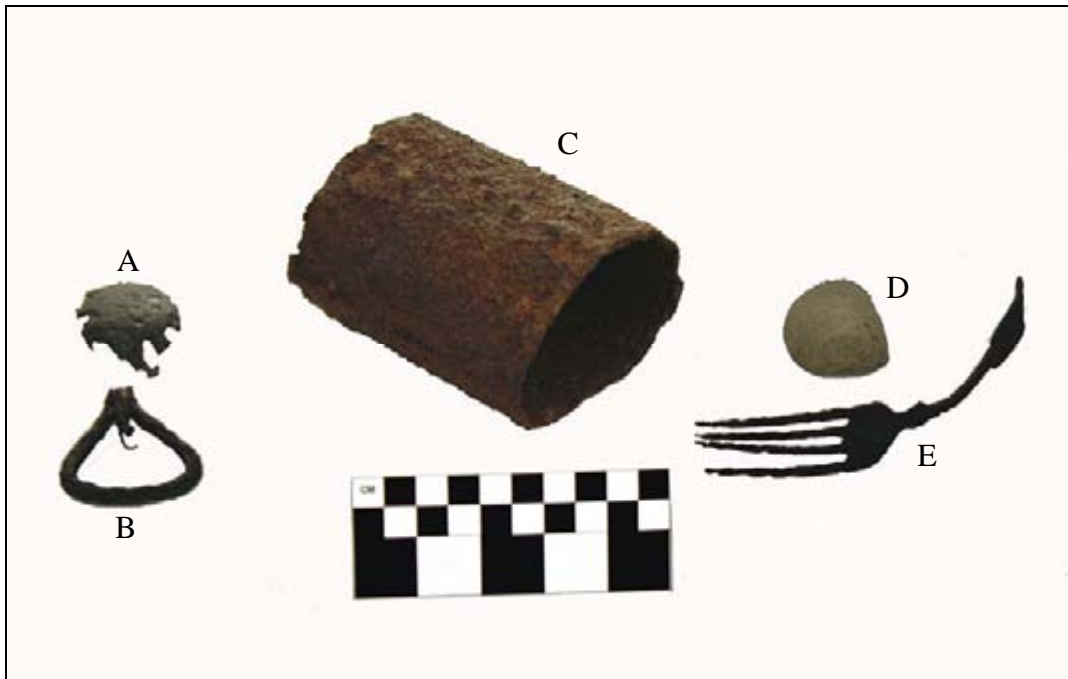


Figure 108. Examples of recovered kitchenware items: A) iron spoon bowl, B) iron folding cork screw, C) tin can, D) pewter spoon bowl, and E) iron fork.

Cooking vessels included two fragments of an iron lid for a kettle or dutch oven (Figure 109) and a portion of a spider skillet (Figure 110). Spider skillets were equipped with long, narrow legs welded to the bottom of a standard skillet that allowed the pan to sit above the coals without having to use a grate or other means of raising it. They were used widely prior to the invention of the cook stove in the mid 19th century and persisted until after the Civil War when they were replaced by flat bottomed pans (Ross 2001). A large portion of a sheet iron (possibly tinned) boiler or kettle was recovered as well. Unfortunately, it had been crushed and was heavily corroded. Two attachment points for a bale handle were noted on the upper rim of the vessel.

Arms Group

The Arms Group, as defined by South (1977), included only those items directly related to firearms. This has been modified for the purposes of this report to include the accoutrements that almost every soldier carried into combat. Beyond his rifle and its ammunition, the Civil War infantryman was issued a wide variety of equipment that was required to make him an effective warrior. A cartridge box, a cap box, a bayonet and its scabbard as well as a canteen were ubiquitous to almost every foot soldier. As the current project area consisted of an infantry camp, it was assumed that a major portion of the artifact assemblage would consist of items within the Arms Group. This proved to be an incorrect assumption. Only 156 artifacts from this group were recovered, accounting for 2.7 percent of the total assemblage. These materials were further divided into two more narrow categories, Weapons and Accoutrements, for analysis.



Figure 109. Fragments of iron Dutch oven or kettle lids.



Figure 110. Fragments of an iron spider skillet.

Weapons

The Weapons category included percussion caps (n=48), ammunition (n=46), bayonet fragments (n=7) and lead fragments used in the on-site production of bullets (n=16). One gun flint for a flintlock firearm, one possible friction primer loop from an artillery piece and one shotgun shell base were also recovered. The shotgun shell base was brass and was part of a 12 gauge wound paper shell. It was headstamped "U.M.C. Co, NEW CLUB, No 12", indicating that it was made between 1867 and 1911 by the Union Metallic Cartridge Company (www.cartridge-corner.com). This artifact was obviously intrusive and was likely dropped while hunting or target shooting in the field well after the war.

Although the percussion caps were the most common of the Arms Group artifacts, they have little analytical value. All of them were the top hat style used on percussion rifles and muskets during the Civil War. The percussion cap represented a quantum leap in firearms technology. It solved the problems associated with the flintlock ignition system, such as moisture intrusion, broken flints, clogged flash-holes and loss of the priming charge. The percussion ignition system relied upon a small, brass cap shaped more or less like a top hat. The interior of the top of the cap was coated with fulminate of mercury, a highly volatile substance that exploded when struck by a sharp blow. The cap was placed on a nipple that replaced the frizzen and flash pan of the flintlock. The nipple was cylindrical in shape with a conical hole bored through it. When the gun was fired, the hammer struck the cap against the nipple, which detonated the fulminate, sending a spark through the hole in the nipple to the main powder charge. This system was more closed than the flintlock, and was far more reliable.

The percussion cap was invented in the 1830s and was first employed on a U.S. military longarm with the Model 1842 musket, although many of the flintlock Model 1816 muskets were converted before 1842 (Coates and Thomas 1990). It is interesting that a gunflint was recovered from the Florence site, as very few flintlock muskets were still in use. This may indicate that someone there had been issued an unconverted Model 1816 musket or that a soldier had brought his personal rifle with him.

Recovered ammunition included both spherical and conical bullets as well as smaller caliber spherical shot. Smoothbore muskets in use with the American military in the early 19th century used spherical lead balls. The balls were slightly smaller in diameter than the bore of the musket to aid in loading, but this made them inherently inaccurate. The extra space between the inner wall of the barrel and the ball, known as windage, allowed for the ball to literally bounce as it traveled the length of the barrel. Therefore, the ball would not leave the barrel traveling the same direction on every shot. European armorers and American sportsmen during this period had learned that rifling the barrel improved accuracy by imparting spin to the projectile which stabilized its flight (Thomas 1997).

The problem of windage had still not been satisfactorily solved however. A cloth patch wrapped around the ball helped, but still allowed the propellant gases to escape around the ball, which affected accuracy as well. Several contrivances for sealing the ball to the

rifling were tried in Europe, including driving a ball of the same diameter as the bore in with a ramrod and mallet, but none were practical for military use (Thomas 1997).

In 1849, Claude Minie of France developed a new means of dealing with windage. Minie had been working on the problem for many years, and borrowing on the work of others as well as his own research, he designed a bullet that used the expanding propellant gas to seal the bullet to the rifling. Minie's design called for a cylindro-conical bullet with three grooves around the exterior and a hollow cavity in the base. The base was sealed with an iron cup, or "wedge", which was driven into the ball when the powder charge ignited, forcing the thinned base of the bullet to expand to the full bore of the barrel. While immediate improvements in accuracy were noted, there were still problems as the wedge was sometimes pushed completely through the bullet or caused it to break, leaving it jammed in the barrel. In spite of this, Minie's design for rifle ammunition was soon accepted across Europe or served as a starting point for other designs, such as the English Enfield ammunition that used a wooden plug instead of an iron wedge (Thomas 1997).

Despite the issue with the wedge, the American military saw the potential of the new design. In tests conducted in the early 1850s, the American armorers realized that the wedge was unnecessary for expansion of the base of the bullet. Bullets designed by James H. Burton, Master Armorer at Harper's Ferry during the tests, had a conical base cavity and thinned edges that allowed the propellant gas alone to expand the base of the bullet. While Burton's design was successful, it became clear during the tests that the relatively larger cylindro-conical bullets were not well suited to the .69 caliber U.S. standard. A larger powder charge was necessary to provide adequate velocity, which in turn increased recoil to a level unacceptable to the testers. Experiments with .54 caliber rifles proved that a smaller caliber would be preferable, so in 1855, the Army settled on .58 caliber as the size for their new rifle musket, the Model 1855 (Thomas 1997).

The bullets recovered at Florence were a combination of the newer and old technologies (Figure 111). Twenty spherical large caliber balls, seven Minie balls and 16 spherical small caliber shot were recovered. In addition, two possible pistol bullets and one flattened bullet of indeterminate form were recovered. Based on the diameter of the balls, it appears that 13 of the spherical bullets were intended for use in .69 caliber muskets while seven were probably for .54 caliber rifles. One of the ways that the inaccuracy of smoothbore .69 caliber muskets was compensated for was through the use of "buck and ball" loads, which employed a nominal .64 caliber ball with three .31 caliber shot nested above it. It was felt that multiple projectiles would increase the probability of hitting the target. Buck and ball loads proved to be very effective at close range and were favored by soldiers guarding prisoners and some front line troops (Thomas 1997). It is likely that the .69 caliber balls recovered along with the .31 caliber shot were constituents of buck and ball loads used by the Confederate guard. This also indicates that .69 caliber weapons were still in use on the site, which suggests the presence of state reserve troops, as very few front line regiments were equipped with these older weapons by 1864.

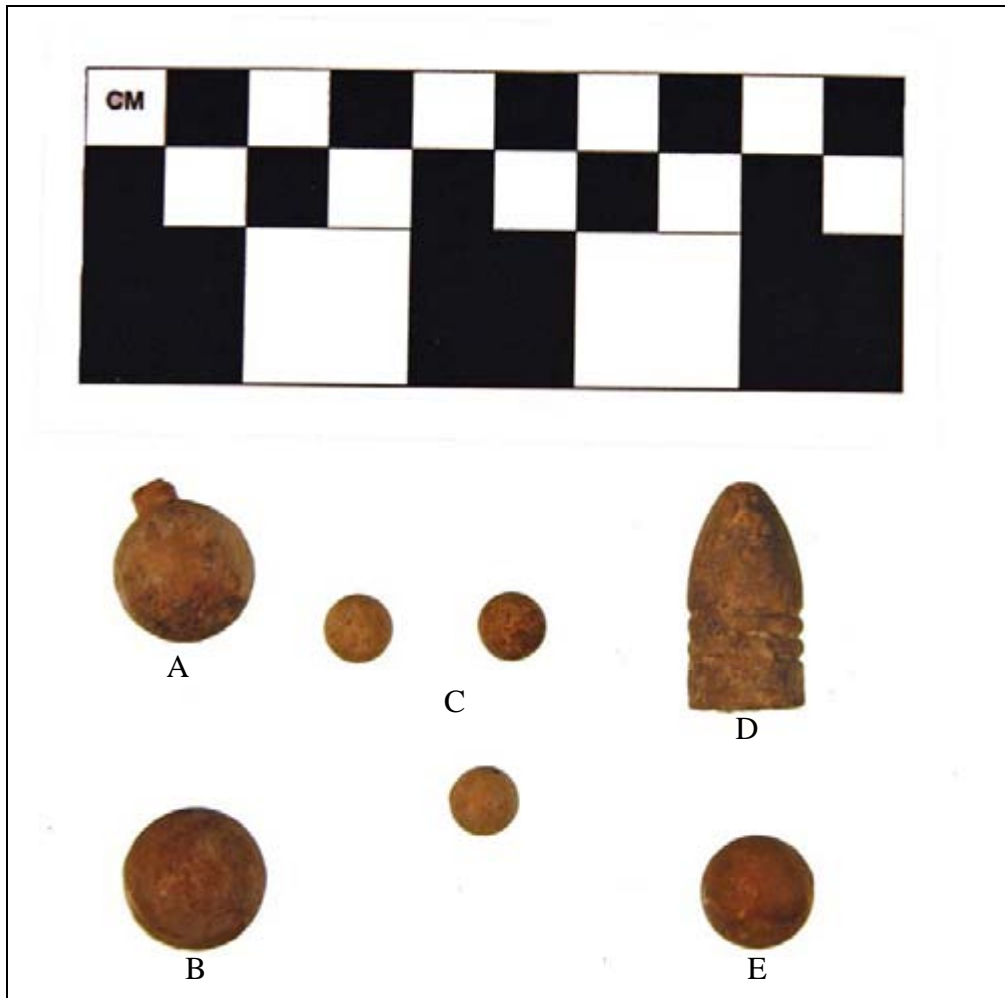


Figure 111. Examples of recovered ammunition: A) .69 caliber round ball with sprue, B) .69 caliber round ball, C) .31 caliber shot, D) .54 caliber minie ball, and E) .54 caliber round ball.

The presence of .54 caliber spherical balls is more difficult to explain. According to Thomas (1997:103), balls in this caliber ranged in diameter from .525 to .535 inch and were seldom used outside of artillery case shot. The balls designated as .54 caliber that were recovered at Florence measured between .521 and .535 inch in diameter. The Confederate Army used at least two weapons in .54 caliber (the Mississippi or Palmetto rifle and the Austrian-made Lorenz rifle musket), so the presence of ammunition in this caliber is not impossible (Coates and Thomas 1990). These balls could have been used in either of the above rifle muskets if supplies of Minie balls were limited, which is possible at this late stage of the war. They could also have been derived from artillery rounds as artillery pieces were used to guard the prison. Another possibility is that the balls were brought in as components of artillery rounds but were used by the guards for their rifles when other bullets were not available. Unfortunately, no other evidence was noted that addresses this question.

Only seven Minie balls were recovered, six in .54 caliber and one that may have been .577/.58 caliber, but the base was distorted apparently due to firing. The .54 caliber bullets were generally the same form with one exception. They had three grooves and roughly conical base cavities. The one exception is a relatively short .54 caliber bullet with very faint lines around the circumference where the grooves would be normally and a very deep conical base cavity. On the others, the distance from the edge of the base to the first groove appeared to be longer relative to the total length than that seen in reference materials showing Minie balls. No explanation for this has been discovered.

The rifle that this ammunition was intended for is not known either. As discussed above, the Mississippi or Palmetto rifle as well as the Austrian Lorenz rifle musket were made in .54 caliber and were used by Confederate forces. The Model 1841 rifle, or “Mississippi” rifle was originally manufactured in .54 caliber, but many were rebored to .58 caliber before the Civil War. They were well made and were extremely popular during the Mexican War. Production ceased in 1855, but Mississippi rifles were used throughout the Civil War. The Palmetto rifle is a direct copy of the Model 1841 made by the William Glaze Company of Columbia, South Carolina in 1852 and 1853. According to Coates and Thomas (1990:26) only about 1000 were made, but most were issued to state militia. The Austrian Model 1854 rifle musket, also known as the “Lorenz”, was imported in large quantities by both sides throughout the war. The most common caliber was .54, although many that the U.S. imported were converted to .58 caliber (Thomas 1997).

The origin of the two pistol bullets is unclear as well. Both had been fired and were severely distorted by impact. Both were probably conical as indicated by the slightly cupped base of each. Both measured slightly over .32 inch in diameter, suggestive of a .36 caliber revolver. The Confederate Army used a number of revolvers in this caliber including the Colt 1851 Navy and its Confederate clones (made by Griswold and Gunnison, Leech and Rigdon, Dance Brothers), the Remington Model 1861 Navy and the Spiller and Burr (Coates and Thomas 1990). Any number of revolvers made by small, local companies were privately owned and carried by Civil War troops, so it is very difficult to assign two heavily damaged bullets to a specific weapon.

Seven fragments of bayonets, representing at least four weapons were recovered. Three were recovered from one of the wells (Feature 518) and were completely encased in oxidized metal and sand. Careful mechanical cleaning followed by electrolysis allowed the remaining steel to be stabilized and for some diagnostic features to be recorded. Unfortunately, the steel was very badly corroded and the cleaning process caused the artifacts to fragment. The blade of one example remains in fair condition, with approximately 10 inches of length and the shank intact (Figure 112). Only a small portion of the socket retained its integrity. The majority of the socket of another example was conserved with only the shank and a short piece of the blade.



Figure 112. Bayonet blade and socket.

All the bayonets were the socket type with angular blades that were the standard issue before and during the Civil War. This basic form of bayonet had been established with the Model 1816, which included a socket made to fit over the outside of the barrel, with a mortise cut into the socket that held the bayonet in place using either the front site or a lug welded to the barrel. The blades were triangular in cross-section with flutes cut in to the blades. Many of the weapons manufactured for or bought by the U.S. military in the early 19th century used a specific type of bayonet, but most followed this pattern (Reilly 1990).

With the introduction of the short-lived Model 1835 musket, the Model 1835 bayonet became the standard form that would see little deviation until well after the Civil War. Two notable innovations of the Model 1835 bayonet were the full length faceting of the face of the blade and the addition of a tapered locking ring that held the socket in place on the muzzle of the musket. The socket indexed on a lug located beneath the barrel of the gun. The Model 1835 was also utilized on the Model 1842 musket and rifle musket. The Model 1841 rifle (Mississippi rifle), which was initially not designed to use a bayonet, was later retrofitted to accept a variant of the 1835 bayonet. They were modified by the addition of a mounting lug under the barrel, first for a saber bayonet in 1855, then for a slightly modified version of the Model 1835 in 1859. The bayonet produced for the 1841 rifle had a smaller bore to fit the .54 caliber barrel and had a shorter blade to better balance the shorter barrel of the rifle. (Reilly 1990).

The final form of the bayonet that would see the most extensive service during the Civil War was reached with the production of the Model 1855 bayonet, designed for the new Model 1855 rifle musket. The only changes from the Model 1835 bayonet were a more tapered shoulder at the base of the blade and an indentation in the locking ring that engaged the stop

pin, rather than a projection. They were also made to fit the new .58 caliber barrels as opposed to the older .69 caliber weapons. The mortise was cut to use the front site as the mounting lug rather than separate piece. The Model 1855 was used on the Model 1855 rifle musket as well as the Model 1861 and Model 1863 rifle muskets. It could also be used with the British 1853 Enfield rifle musket, but this weapon was typically shipped with bayonets produced in England (Reilly 1990, Coates and Thomas 1990).

Specific identification of the bayonets recovered from Florence was difficult due to the poor preservation of the artifacts. The socket of one example provided enough detail to identify it with some certainty as a Model 1835 bayonet. The mortise is cut for an under-barrel mounting lug and the rim for the locking ring is present (Figure 113). As discussed above, this model was used on Model 1842 muskets and Model 1841 rifles after 1859 (Reilly 1990). The shoulders of the blades of two other bayonets appear to have been tapered, although this could be the result of taphonomic processes rather than manufacture. If they were manufactured in that shape, they were likely Model 1855 bayonets used on the Models 1855, 1861 and 1863 rifle muskets as well as the British Enfield (Reilly 1990).



Figure 113. Model 1835 bayonet socket.

Accoutrements

The remains of at least five canteens were recovered from the Florence campground, represented by one complete example and 26 fragments of others, as well as five lengths of light, cuprous chain. The standard issue canteen of the U.S. Army during the Civil War was the Model 1858. Often copied by Confederate manufacturers as well, the Model 1858 was oblate-spheroid in shape and consisted of a front and back section joined at the edges by solder. They were equipped with pewter or, less often, tin spouts secured to the body of the canteen by a tin flange and a cork stopper with a metallic ring shaped pull. The stopper was usually attached to the canteen by a brass chain. Three tin sling loops and a cotton or leather sling provided the means to carry the canteen, which held three pints of water. Many variants existed, generally based on which manufacturer produced the canteen. One widely popular variant was manufactured with a series of concentric rings on each face. Known as “bull’s-eye” canteens, it was believed that the rings reduced damage from denting (Sylvia and O’Donnell 1983).

Six fragments of what was likely a Model 1858 canteen were recovered. One larger fragment retains the joint between the two halves of the canteen. The fragments represented only a small portion of the canteen and were corroded. One large pewter spout and the brass chain fragments were also probably portions of a canteen of this type.

The tin drum canteen was second only to the Model 1858 in use and was more common with Confederate forces. It came in a wide variety of shapes and sizes, but generally was produced by soldering a circular front and back section to a narrow band that formed the side of the body. Spouts were generally tin and came in as many variants as the body. Three tin sling loops and a cotton or leather sling were standard (Sylvia and O’Donnell 1983).

One complete tin drum canteen was recovered from Florence (Figure 114). The canteen was corroded and crushed, but was in generally remarkable condition. When located in the field, it was decided to remove the artifact with a supporting block of feature fill beneath it. Once removed, it was placed in a cardboard box packed with sand for transport to the laboratory for cleaning. Before cleaning in the lab began, a radiograph of the box containing the canteen was taken to provide an idea of its shape and size (Figure 115). The radiograph clearly shows two sling loops and the tapered collar around the remnants of the spout. To clean the canteen, the sand was removed and the fill adhering to it was carefully brushed and picked away until the dark brown outer layer of corrosion was encountered. The surface was fairly evenly corroded, with some areas where bright tin was still visible but others where the metal was literally paper thin. The sand on the interior of the canteen was removed where possible, but much was left in place as its removal would have severely damaged the artifact. Once the canteen was clean, it was coated with a rust converter to stabilize the metal.

The crushed condition of the canteen made measurements difficult, but the diameter ranged from 5.6 to 6.3 inches while the thickness ranged from 0.97 to 1.35. It appears that it was approximately six inches in diameter and one inch thick while in use. The sides appeared to

be slightly convex, but this was difficult to determine as well. A flared tin collar attached the spout to the body, but the spout was broken above the collar. Another collar and spout were also recovered from a different provenience, as was another tin spout.



Figure 114. Confederate drum canteen recovered from Feature 502.

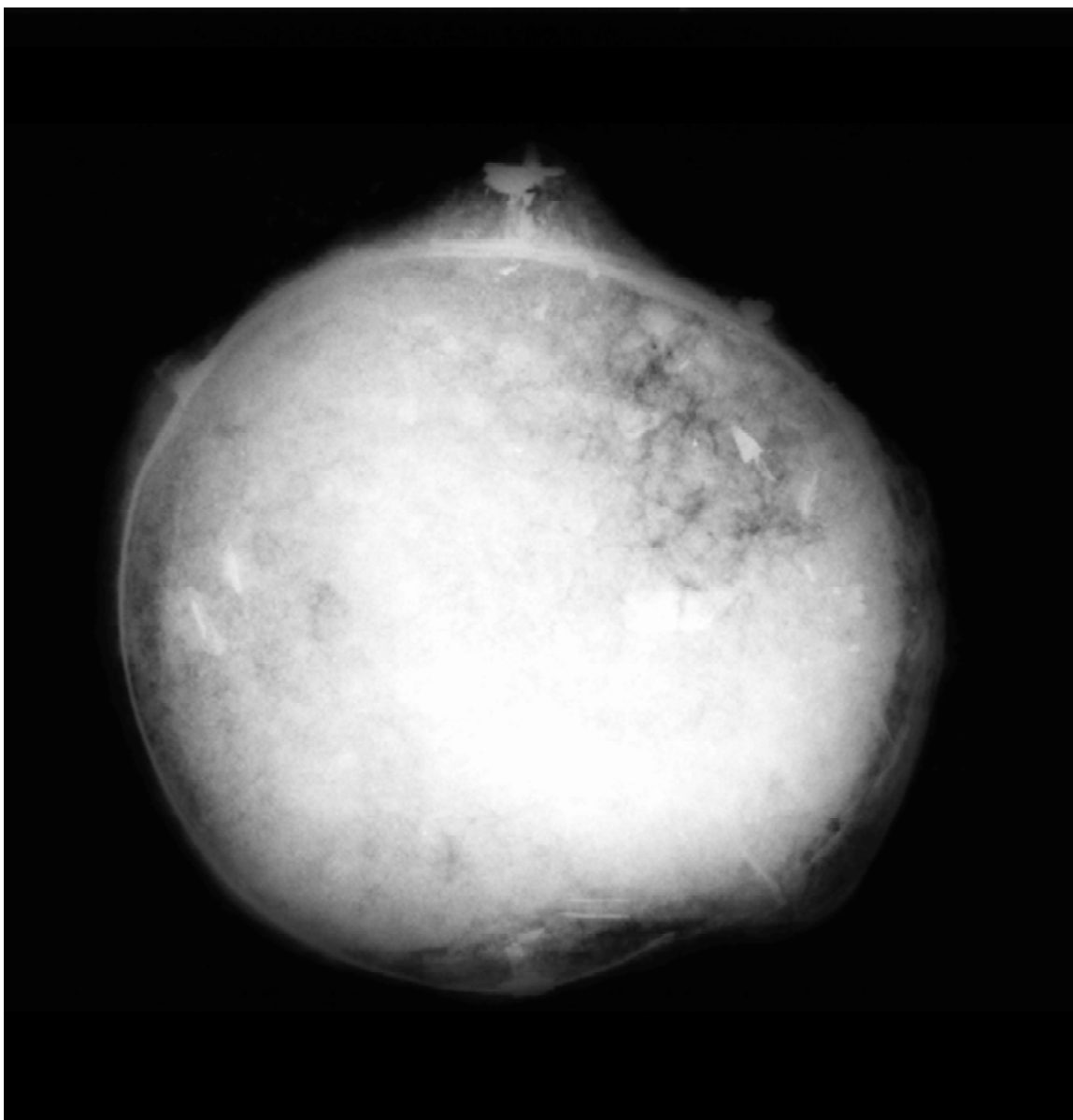


Figure 115. Radiograph of drum canteen prior to conservation.

As the war progressed and the South's supplies of tin dwindled, the Confederate military turned to wooden canteens, although they were used by Union forces as well. They were fairly consistent in shape and size, with a front and back secured to between 10 and 12 slats by iron or brass bands. Constructed much like a barrel, they were typically made of cedar and measured 7 to 7.5 inches in diameter, holding one quart of water. Spouts were generally turned wood and iron bands were used for strap loops (Sylvia and O'Donnell 1983). While the acidic soil and heavy rainfall found in Florence made the recovery of any wooden artifacts unlikely, 17 fragments representing two brass bands were recovered from the base of a well (Feature 502) (Figure 116). The bands were too fragmentary to establish a precise diameter or circumference, but they appeared to be approximately the correct size upon visual inspection.



Figure 116. Portion of a brass band from a wooden canteen.

The most efficient means of keeping the components of a round of ammunition together, that is the powder charge and the projectile, was to combine them into a cartridge. The standard cartridge during the Civil War was composed of a paper tube of sufficient diameter to accommodate the bullet. The bullet was placed in the tube nose first and the end of the tube cinched closed with twine. The powder charge was contained in a separately wrapped cylinder of easily torn paper that was placed in the cartridge behind the bullet. The end of the cartridge was then folded over and pasted to the side to enclose the entire load. To load, the soldier tore the end off of the cartridge to expose the powder, which was poured down the barrel. He then broke the cartridge just below the bullet, then pressed the bullet out of the paper and into the muzzle. Cartridge paper could be used as a wad between the powder and the bullet, but adversely affected accuracy if left around the ball (Thomas 1997).

Cartridges were prepared by the various arsenals and packed in bunches of ten rounds, with 12 percussion caps included in the pack. Soldiers received their ammunition in these packs, with 40 rounds as the standard issue per soldier. While in the field, each soldier carried his ammunition in a cartridge box, generally worn over the shoulder. The Model 1855 cartridge box was created for the new .58 caliber standard load was the standard issue during the Civil War for both sides. Dozens of variants existed depending on which arsenal or contractor produced the box. They were made of stiff leather, with squared sides that were sewn to the front and back. The box was covered by two flaps, one smaller inner flap and one large exterior flap that could be secured by a slotted strap that fit over a

finial mounted to the bottom of the box. The inner flap prevented loose cartridges from falling out of the box when the outer flap was left open during combat. The box was carried by a wide leather strap that was generally worn over the shoulder and across the body. The cartridges themselves were stored in tins that fit inside the leather box. Many variants existed, but the basic form was a tin tray with an opening on the bottom that held an unopened pack of 10 rounds and another on top that held 10 loose rounds. Two of these trays were placed side by side within the box to accommodate the standard 40 rounds. Single tins that were the equivalent of the two smaller ones together were also widely used (Crouch 1995).

Once the packages containing the cartridges were opened, the loose percussion caps were carried in a small leather cap box worn on the belt. The box was covered by a flap secured much like the cartridge box. They were generally lined with fur or lamb's wool to prevent the caps from falling out of the box if the flap was left unsecured (Coates and Thomas 1990).

A one piece cartridge box tin was recovered from the Florence site (Figures 117 and 118). As with the canteen discussed above, it was crushed and corroded, so it was removed with a large block of surrounding feature fill to maintain its stability during travel. Radiographs of the artifact were used to guide the cleaning efforts (Figure 119), which included careful brushing and picking the sand from the surface of the tin. The lower compartments were packed with sand, but were completely cleared. The upper compartments were more badly crushed, causing the dividers to be very delicate. Much of the packed sand in the upper compartments was left in place rather than risk damaging the artifact. Once cleaned the entire artifact was coated with rust converter to stabilize the remaining metal.

The recovered cartridge box tin was a one piece model, with four upper compartments divided by thin tin strips soldered in place. The lower compartment was divided into two sections and had a narrow lip at the base. The tin appears to have measured 6.5 inches wide by 5.5 inches tall by 1.5 inches thick. The upper portion was crushed, which displaced the dividers and separated one edge of the front of the tin from the side. This form of tin was used in the Model 1855 cartridge box and was often copied by Confederate manufacturers. What appears to be the exact same form of cartridge box tin can be seen in Crouch (1995:100).

In addition, two finials likely derived from either cartridge or cap boxes were recovered. One of the finials was made of brass and still retained a bit of leather between the base of the finial and the rivet that held it in place. The other was a slightly different form and was made of lead. According to Crouch (1995), Union cap and cartridge boxes used brass hardware while the Confederate versions often used lead or pewter.

Clothing Group

The Clothing Group included 77 artifacts, accounting for 1.3 percent of the assemblage. Clothing items included buttons (n=54), other fasteners (n=11), clothing material (n=11) and one military insignia.



Figure 117. Cartridge box tin recovered from Feature 425.



Figure 118. Top of cartridge box tin.

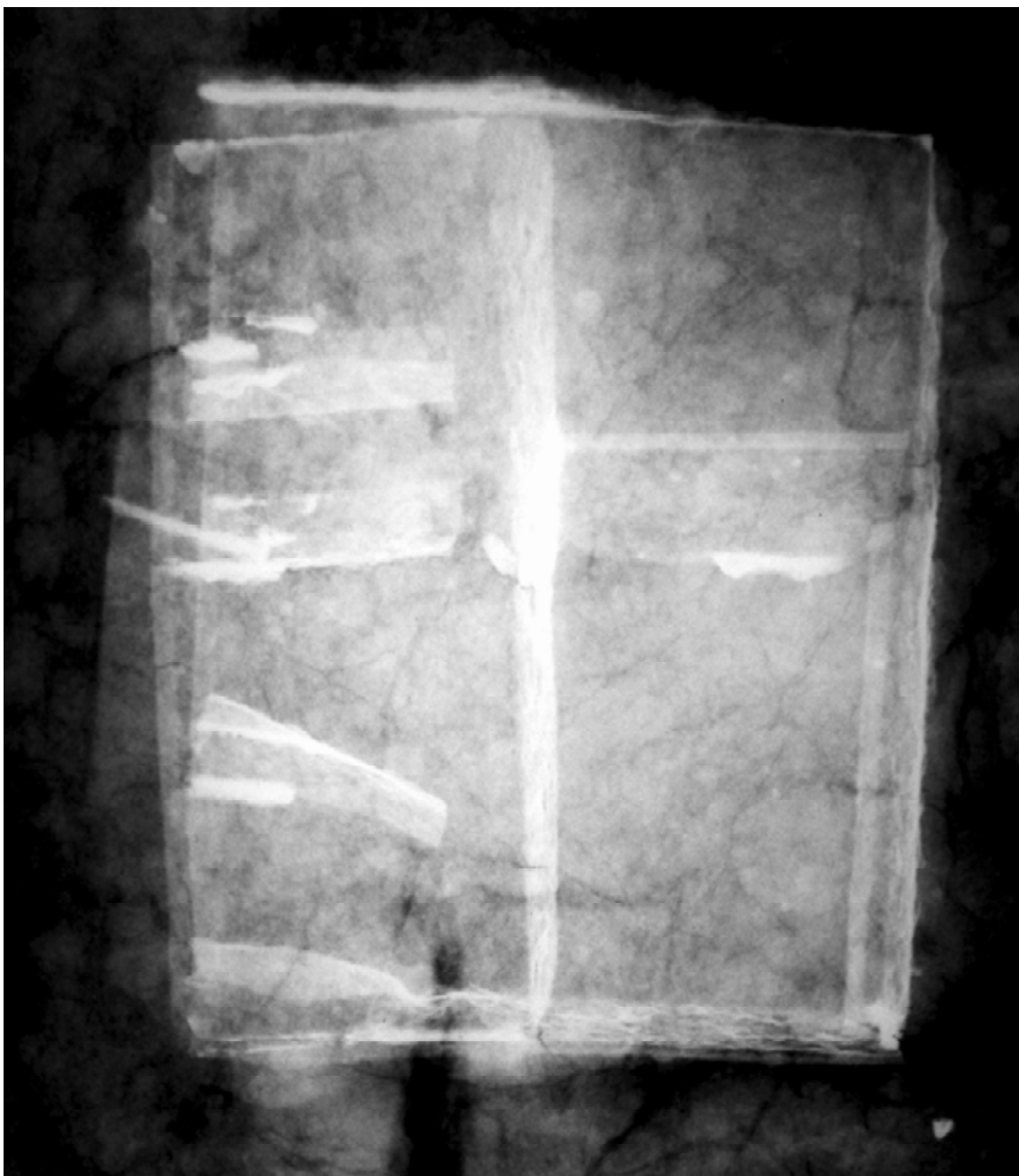


Figure 119. Radiograph of cartridge box tin prior to conservation.

Buttons

Buttons were produced from a wide array of materials and are an almost ubiquitous item on American historic sites. Most Civil War period military uniform buttons that were to be used in a visible location, such as on a jacket, coat or hat were made of a brass top that was typically convex pressed onto a flat brass back. A wire loop was either inserted into or soldered onto the back as a means of sewing the button on the garment. The button front was die-struck to form the shape and impart whatever design was desired, while the back might be stamped with a maker's mark. The center of American button manufacturing was in the New England states of Massachusetts, Connecticut and New York. With the beginning of the Civil War, the supply of domestically-made buttons to the southern states effectively ended. Imports from England were soon all but halted by the Union blockade of Confederate ports. Large stockpiles of buttons manufactured before the war were soon exhausted, leaving the Confederate government to rely on smugglers and manufacturers with crude equipment for buttons (Tice 1997).

U.S. military regulations dictated the style of button to be worn on the uniform of members of the various branches of service. Beginning in 1821, members of the infantry were issued buttons with the spread eagle design, with an 'I' on the shield. In 1854, a similar design but with a blank shield was adopted for enlisted men while officers continued to wear the old design until 1902. A similar progression was followed for the other branches of service, with the artillery using an 'A' on the shield and the cavalry using a 'C'. By 1855, all branches had adopted the blank shield for enlisted men while the officers continued to use the appropriate letter until after the turn of the 20th century (Tice 1997).

Nine buttons with the spread eagle device were recovered from Florence, including six with no letter on the shield, two with an 'I' and one with a 'C' (Figure 120). Even though these buttons would have been standard issue to Union soldiers, their presence at the camp at Florence can be explained. All of these patterns pre-date the war and could easily have been stock piled by state militias and then issued to Confederate troops. It is also possible that they were either taken from or received in trade with the Union prisoners inside the stockade, a practice that was documented by prisoner accounts (Snell 1996). It seems unlikely that the 'I' and 'C' buttons were taken from prisoners as these types were worn only by officers after 1854, and the Florence Stockade was used to house enlisted men rather than officers.



Figure 120. Union military buttons: (l to r) Eagle “C”, Eagle “I”, and regular eagle.

Two styles associated with Confederate forces were encountered. The regulations of the Confederate military specified the types of buttons to be worn on the uniform in 1861. They were similar to the U.S. regulations, but the design for each branch differed. Officers of the infantry were to wear buttons with the letter ‘I’ only, either in script or Roman or block characters. Enlisted men were to be issued buttons with the regimental number on the front, but according to Tice (1997:197) these were never produced. Buttons with the ‘I’ were produced only by British and Confederate manufacturers (Tice 1997). The cap of one button bearing the block ‘I’ was recovered (Figure 121), which may indicate the presence of an officer in this area of the camp.



Figure 121. Confederate military buttons: (l to r) block “I” and South Carolina state seal.

A small button bearing the seal of the state of South Carolina was recovered as well (see Figure 121). The front exhibits the palmetto tree with two arrows crossed and bound to the trunk over an oak log. The state motto, *Animis Opibusque Parati* (Prepared in mind and resources) surrounds the seal but is separated from it by a solid line. The whole is on a lined field. The back is marked “**SCOVILLS & CO **”. This button was produced for the South Carolina militia by the Scovills and Company of Waterbury, Connecticut between 1840 and 1850 (Tice 1997).

The remaining buttons were made of ferrous metal, Prosser, bone and goldstone. The goldstone button or stud was recovered from the human burial encountered in Feature 95 along with 17 fragments of metal buttons and three Prosser buttons (Figure 122). The goldstone button consisted of a short tapered cylinder of black hard rubber or gutta percha with a six-petalled flower in goldstone inset on the top. A red inset of an unknown material was located in the center of the flower. The rubber portion is attached to a ferrous metal base that is larger in circumference. Remnants of woven cloth are visible on the back of the metal portion of the button. No documentary information was available on this type of button, so little is known about it other than it was undoubtedly a civilian type. The other buttons associated with Feature 95 will be discussed in detail below with the rest of the assemblage from that feature.



Figure 122. Buttons from Feature 95: (l to r) prosser, goldstone, and fabric covered metal.

Other Fasteners

A wide variety of other fasteners were identified, including buckles (n=8), one metal eyelet, one metal grommet and part of a snap. Seven of the buckles were iron while one was brass (Figure 123). The brass buckle was thin and had been stamped with a floral motif. The iron buckles were small to medium in size and could have been utilized for a number of things. It should be made clear that iron buckles were used on a wide variety of things, including horse tack, cartridge boxes and haversacks as well as clothing items. They have all been grouped with the other clothing items as it was not possible to determine a precise function for them.



Figure 123. An iron buckle (left) and a decorative brass buckle part (right).

Insignia

U.S. Army regulations (USWD 1861) called for members of infantry regiments to wear a brass pin in the shape of a French or “hunting” horn on their hats, along with their regiment number and company letter. The hat device of an officer was to be embroidered, but brass versions made to look as if they were embroidered were common. The Confederate Army

used color trim on the hat and uniform to designate branch of service, but not the brass horn emblem. One fragment of a Union infantry hat device was recovered from Florence (Figure 124). The bell of the horn and a portion of the body remain. It does not have the embroidered appearance, so was likely worn by an enlisted man. It is unusual in that the bell faces to the right, where every example seen by the author in collector's books (Crouch 1995, Phillips 1975) and on numerous websites show the horn pointed to the left. Whether this difference is significant or just a manufacturing anomaly is unknown. It is likely that the pin was either taken or traded from a Union prisoner.



Figure 124. Union “hunting horn” infantry insignia.

Personal Group

The Personal Group was represented by 66 artifacts, which accounted for 1.1 percent of the total assemblage. This group can be particularly interesting as it is composed of things used by individual soldiers rather than issued to the group. The artifacts recovered from this group included comb parts (n=48), finger rings (n=4), photograph frames (n=4), pencil lead (n=4), glass marbles (n=2), one sutler's token, one U.S. penny, one wallet frame and one carpet bag latch. The glass marbles were recovered from the surface and were manufactured well after the Civil War.

The most common personal artifacts were hard rubber hair comb parts, primarily teeth. Of the 48 comb parts, only two were parts of the handle rather than teeth. Charles Goodyear's discovery of the vulcanization process for rubber was quickly followed by his brother

Nelson's development of hard rubber in 1851. By the beginning of the Civil War, a large variety of items were being produced that were made of hard rubber. Combs, such as those represented at Florence, were inexpensive to manufacture and were readily available to soldiers through most sutlers (Woshner 1999).

Four rings, also made of hard rubber were recovered (Figure 125). Jewelry of this type was very popular during the 1850s and 1860s. Two of the rings appear to be factory produced. The top of one was in the shape of a shield with a round inset, while the other had a long, thin rectangular inset. The stone or other decorative element was missing from both rings. The other two appear to have been hand carved from other rubber items. The exterior of one example appears perfectly round while the hole in the center is irregular and rough. It is possible that a hard rubber button, a common form during the war, was carved to form the ring (Woshner 1999). It may have been made by one of the guards, or it could have been produced by a prisoner for trade. The other hand carved ring is in two fragments and may have been broken prior to deposition. The ends of what appears to be an older break have been separated by the bending of the ring. It was roughly rectangular, with the interior hole carved to match the exterior shape. It may have been produced from a portion of a handle of a hard rubber comb. Another comb handle fragment with a rough, small hole was noted, which may have been in the beginning stages of carving. No initials or other identifying marks were noted on any of the rings.



Figure 125. Hard rubber rings.

Two forms of currency were identified in the Florence collection. One copper U.S. penny was recovered (Figure 126). It featured the “Indian head” motif on the obverse and “ONE CENT” surrounded by an oak wreath on the reverse. Unfortunately, the date of issue located beneath the Indian’s head was obscured by corrosion. However, based on the design elements present and the weight of the coin, a very narrow date range was established. According to the U.S. Department of the Treasury website (www.treas.gov),

In 1860, the reverse design was changed slightly, showing ONE CENT within an oak wreath, with three arrows inserted under the ribbon that binds the two branches of the wreath. Above and between the ends of the branches is the shield of the United States.

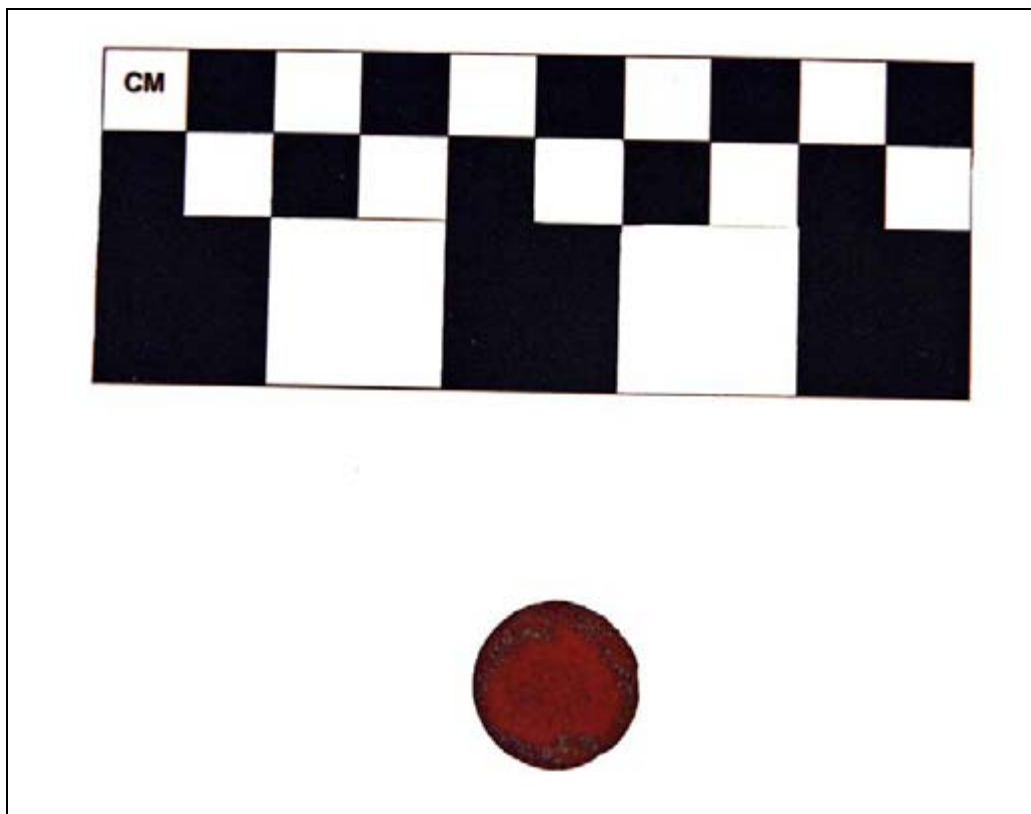


Figure 126. Copper penny.

The coin recovered matches this description. Further, in 1864 the metallic composition of the coin changed, causing a reduction in its weight from 72 grains to 48 grains. The Florence penny weighed 58.6 grains (3.8 grams), well above the post-1864 weight. Therefore, the penny was minted between 1860 and 1864.

Another copper coin, a sutler’s token, was also identified (Figures 127 and 128). Merchants selling various items that were not issued to the troops, such as personal items, tobacco, various food and cooking supplies, were allowed to travel with specific regiments

while on campaign. According to the regulations (USWD 1861), each regiment was allowed one sutler. To encourage the loyalty of the troops to them, sutler's often produced tokens marked with their name which could only be redeemed by them. One such sutler was George McAlpin, who was attached to the 11th Pennsylvania Cavalry. This regiment served with the Army of the James in Virginia (Congressional Record 1893). The token recovered was marked on the obverse with his name around the top, the regimental name around the bottom and their number in the center. A large "5" was on the reverse, indicating that the token was worth 5 cents. Members of the 11th Pennsylvania Cavalry were held as prisoners at Florence, so it is likely that a member of the Confederate guard either took or traded for the token with a Union prisoner of that regiment.



Figure 127. Copper sutler's token, obverse.



Figure 128. Copper sutler's token, reverse.

Other personal items included one possible photograph frame and three small fragments of white metal that may have been a part of another. The frame was broken at one corner and twisted out of shape, but was originally rectangular. The inner portion was rectangular at the base with a rounded top. The inside edge of the frame was beveled. Nor markings or decorations were noted on the metal. It may have been part of a cased tin-type or other mid 19th century framed photograph.

The frame or clasp from a small article such as a wallet and a brass lock mechanism from a carpet bag were identified. The lock (Figure 129) is almost identical to one shown in Phillips (1975:172). The presence of such an item is surprising on a military site and may reflect the presence of new, untrained troops who had just joined one of the reserve battalions.



Figure 129. Brass carpet bag latch.

Activities Group

The Activities Group serves as a catch-all category for items that do not fit within one of the other functional groups. With 1195 artifacts, the Activities Group accounted for 20.5 percent of the total artifact assemblage. In order to facilitate the description of such a wide variety of artifacts, the materials were grouped into general classes based on their presumed function if it could be determined or their form if it could not.

A wide variety of artifacts were recovered (Table 7), but the vast majority of these materials consisted of fragments of sheet tin or tinned iron that were too fragmentary or corroded to determine what specific item from which they were derived. Many items were made of sheet tin or tinned iron during the Civil War period, including cans, food tins, cooking vessels, buckets, small tent stoves and many more. If the true form of the objects from which these fragments were derived could have been determined, this number would undoubtedly have been much smaller.

Table 7. Activities Group Artifacts.

Class	N	Frequency (%)
Sheet Tin/Tinned Iron	1082	90.5
Fuel	33	2.8
Hardware	31	2.6
Crate Bands	24	2.0
Other	14	1.2
Tools	6	0.5
Wagon/Machine Parts	5	0.4
TOTAL	1195	100

The Fuel category included fragments of coal, cinders and slag. These materials were most likely introduced to the site well after the camp was abandoned as soldiers typically used wood as their primary fuel source. With the abundance of pine trees in the area at the time, the soldiers at Florence most likely relied on wood as their primary fuel.

Fasteners (besides nails), washers, railroad spikes and ferrous wire fragments were considered to be Hardware. These items could have been used in a wide variety of functions across the camp.

Thin bands of metal were considered to be potential Crate Bands. Wooden crates used to ship any number of goods were often held together with similar metal bands. Their presence on the site may indicate that supplies were arriving at the camp in crates, that they were being recycled or both.

The Other category included those things that did not fit within another category or simply could not be identified. One interesting artifact was a brass padlock fly stamped on the front with a crown and the initials “WR” and below this, “PAT N” (Figure 130). The rear was stamped “20C”. The front mark is indicative of a British import, with the initials representing the ruling monarch at the time (Crouch 1995). The initials WR would represent King William IV, dating the production of the lock to between 1830 and 1837. The meaning of the markings on the rear of the fly are not known and no documentary information on this type of lock was located.



Figure 130. English marked padlock fly.

The Tool Category included at least two shovel blades and fragments of a wooden handled wrench or lever. One of the shovel blades in particular was in extremely good condition (Figure 131). It was broken across the blade below the socket where the handle attached. The shovel was hand-forged and was apparently formed by folding a sheet of iron on itself and shaping the rest of the tool. The socket exhibits a welded seam on either side and thin bars of iron have been welded to the area where the foot pushes the blade. The other shovel blade was similar in form, but was in very poor condition. The presence of shovels may have been something of a luxury, as Eccles wrote on October 12, 1864 that, “our men have commenced digging wells, but they have no spades, shovels or picks...”. The absence of such tools at this point is likely due to the inability of the Confederate states to produce or distribute such goods. The fact that the shovels recovered were hand-forged indicates that they were made by a blacksmith, possibly in the Florence area.



Figure 131. Conserved hand-made iron shovel blade.

Another large, flat iron object was recovered that could be a portion of a square-bladed shovel, but this is not clear. It was in extremely poor condition and was not subjected to electrolysis.

Five possible Wagon or Machine Parts were recovered. An iron bracket, a large iron hook with a flat mounting plate, a thick, squared iron band and a heavy, tapered iron cylinder may have been derived from parts of a wagon. An iron handle may have been a wagon or machine part.

Tobacco Pipe Group

Twenty five fragments of earthenware tobacco pipes, representing less than 0.01 percent of the total assemblage, were recovered. South (1977) maintained that tobacco pipes could be grouped with the Activities Group, but should be maintained as a separate group based on their ubiquity on historic period sites. Although this was not the case at Florence, it was decided to follow South's system in this case.

The pipe fragments represented at least nine different pipes, all apparently stub-stemmed varieties. A portion of a redware face pipe with a green lead glaze (Figure 132) and at least two unglazed fluted pipes were recovered. The smoking of tobacco using a pipe was a very popular 19th century past-time and certainly would have been common among the soldiers at Florence.



Figure 132. Lead-glazed redware face pipe fragments.

Faunal Remains

The most common material recovered from the Florence campground was animal bone. Approximately 39,797 grams of faunal material was recovered from every type of feature across the site. Of the 159 features excavated, 111 (69.8 percent) contained animal bone. The faunal remains ranged from tiny fragments to partial large elements, some with butchering marks such as saw or chop marks. The majority of the faunal material appeared to have been deposited after consumption, but some elements not typically used for food, such as skull parts, were recovered, especially from Feature 553. Although budgetary constraints precluded the analysis of the full faunal assemblage, a detailed analysis of the faunal materials from 15 proveniences is presented in Chapter 7.

Spatial Patterning

As with the physical description of the artifacts, their distribution across the site is a critical factor in understanding the landscape of the camp. To this end, the artifact assemblage has been examined for patterns of distribution, both at the group and type level. The average number of artifacts from each group was calculated for each feature type to provide the basis for the distribution of each group (Table 8). The locations of certain individual artifact types were also examined in order to assist with the interpretation of feature types and the location of activity areas within the site.

Table 8. Artifact Group Frequencies by Feature Type

Feature Type	Activities	Architectural	Arms	Clothing	Kitchen	Personal	Tobacco Pipes
Disturbance/Tree	1.1	1.8	0.7	0.0	2.3	1.6	0.0
Structure	23.9	19.5	37.6	50.0	12.7	30.1	24.0
Pit	53.5	25.2	26.0	34.2	48.7	22.2	64.0
Post	0.08	0.3	0.7	0.0	15.0	3.2	0.0
Privy/Slit Trench	16.3	21.4	14.9	13.2	8.0	34.9	4.0
Trench	1.6	0.3	1.3	0.0	0.8	4.8	0.0
Well	3.52	31.5	18.8	2.6	12.5	3.2	8.0
TOTAL	100	100	100	100	100	100	100

Activities Group artifacts were most frequently located in features interpreted to be pits. This is likely due to the recovery of a large number of metal fragments as a result of the discard of sheet tin items in refuse pits. The relatively high frequency of these materials recovered from the houses can most likely be accounted for in the same way.

The Architectural Group was more evenly distributed among the various types of features, but this material was most commonly recovered from the wells. The vast majority of the rest of the assemblage was recovered from pits, privies and slit trenches and the houses. Most of the architectural artifacts consisted of nails and brick fragments that were common across the site. The presence of these materials in the wells and pits is primarily from the dumping of refuse, although the base of at least one well was probably lined with a wooden crate or box held together with nails. Likewise, one of the privies was apparently lined with a wooden crate. The bricks and nails recovered from the houses may represent primary deposits derived from efforts to improve the structures with board walls and brick hearths.

The majority of the Arms Group artifacts were recovered from houses and pits. The artifacts recovered from the houses consisted primarily of ammunition components, such as percussion caps and bullets, small items that were easily lost. While ammunition was recovered from pits, canteen parts and cartridge box parts contributed to the assemblage from the pits, where these items were intentionally dumped.

Exactly one half of the Clothing Group artifacts were recovered from houses, although this figure is primarily due to the relatively large number of buttons and button fragments directly associated with the burial in Feature 95. If the buttons from Feature 95 are omitted, the majority of the Clothing Group would have been recovered from pits, followed by privies and slit trenches. It would be expected to find these items in the houses as this would have been where the maintenance of clothing took place, and buttons were certainly easy to lose if dropped. Those found in pits suggests that they were intentionally disposed of, while those in privies and slit trenches may have been lost while unfastening and fastening garments.

Kitchen Group artifacts were encountered in all feature types but were most commonly recovered from pits. Most of these materials were fragmentary glass containers and ceramic vessels that were probably thrown into the pits after they were broken elsewhere. However, a few pits appear to have been directly associated with the preparation of food. The high frequency seen in post hole fill was unexpected and consisted almost exclusively of container glass. This will be discussed in more detail below.

Artifacts from the Personal Group were relatively evenly divided between privies and slit trenches, houses and pits, although they were recovered from all feature types. The majority of the personal materials were located in privies or slit trenches and were likely lost from pockets or disposed of intentionally. Artifacts recovered from the houses were more likely lost. Broken tines from hard rubber combs were the most commonly recovered personal artifact and were primarily located in pits and houses.

Only a small number of Tobacco Pipe fragments were recovered, with the vast majority located in pits. No intact or complete specimens were recovered, indicating that they were broken elsewhere then disposed of in the pits. The next most frequent location for them was in houses, which more likely represents their location of use and possibly breakage.

The distributions of selected specific artifact types were selected in order to determine if patterns were evident that might provide information on the camp. This approach was of little analytical value using artifacts such as nails or container glass that were distributed widely across the site. Therefore, smaller assemblages and those with specific functions were examined.

Although a very small number of window glass sherds were recovered, the location where they were found is informative (Figure 133). All of the sherds were located in houses, with 12 of the 13 fragments coming from Features 223 and 540. This may indicate that these structures actually were built with glazed windows. According to Nelson (2006:187), it was common for officers on extended duty, such as winter quarters, to place windows in their cabins or huts, often with window frames scavenged from other buildings. It was much less common among enlisted men. Feature 540 was large in plan but shallow, which may indicate that it was a fairly substantial cabin or guardhouse built primarily above the ground surface. Feature 223 was the deepest and largest of the subterranean huts and apparently had board walls. These two features apparently represent the most substantial structures recorded and may very well have included glazed windows.

Besides small buckshot, only two calibers of bullets were recovered. As discussed above, .54 caliber bullets were likely used in either Mississippi/Palmetto rifles or Lorenz rifles. The .69 caliber balls could have been fired by a wide variety of older weapons, but were likely used in Model 1842 muskets. This disparity in weaponry probably indicates the presence of different units of infantry, although a single reserve unit might be issued a mixture of weapons based on availability, especially late in the war. The distribution of the different calibers further suggests that at least two different units were present in the portion of the camp investigated (Figure 134). The .54 caliber ammunition was concentrated in the northern portion of the site, specifically in and around Block A. This type was recovered only from structures and the large pits encountered in this block. One .54 caliber minie ball was recovered from Feature 540 within the northern perimeter of the site as well.

The .69 caliber ammunition was much more widely dispersed across the site than the .54 caliber bullets. Ammunition in this caliber was recovered from as far south as Feature 109 and as far north as Feature 212. It was recovered from a wider variety of features as well, including structures, pits and a privy. This may indicate that this caliber was more commonly in use, at least in this portion of the camp. It is interesting to note that no features contained both .54 and .69 caliber ammunition, but two .69 caliber balls were recovered from Feature 212, which is located in Block A immediately adjacent to two features that contained .54 caliber bullets. While no real evidence exists, the presence of differing ammunition calibers within the same block may indicate that different units occupied this area over the time the camp was occupied.

Despite the low number of buttons recovered (n=54), they were widely spread across the site, extending from Feature 553 in the Southern Perimeter to Feature 540 in the Northern



Figure 133. Distribution of flat glass.

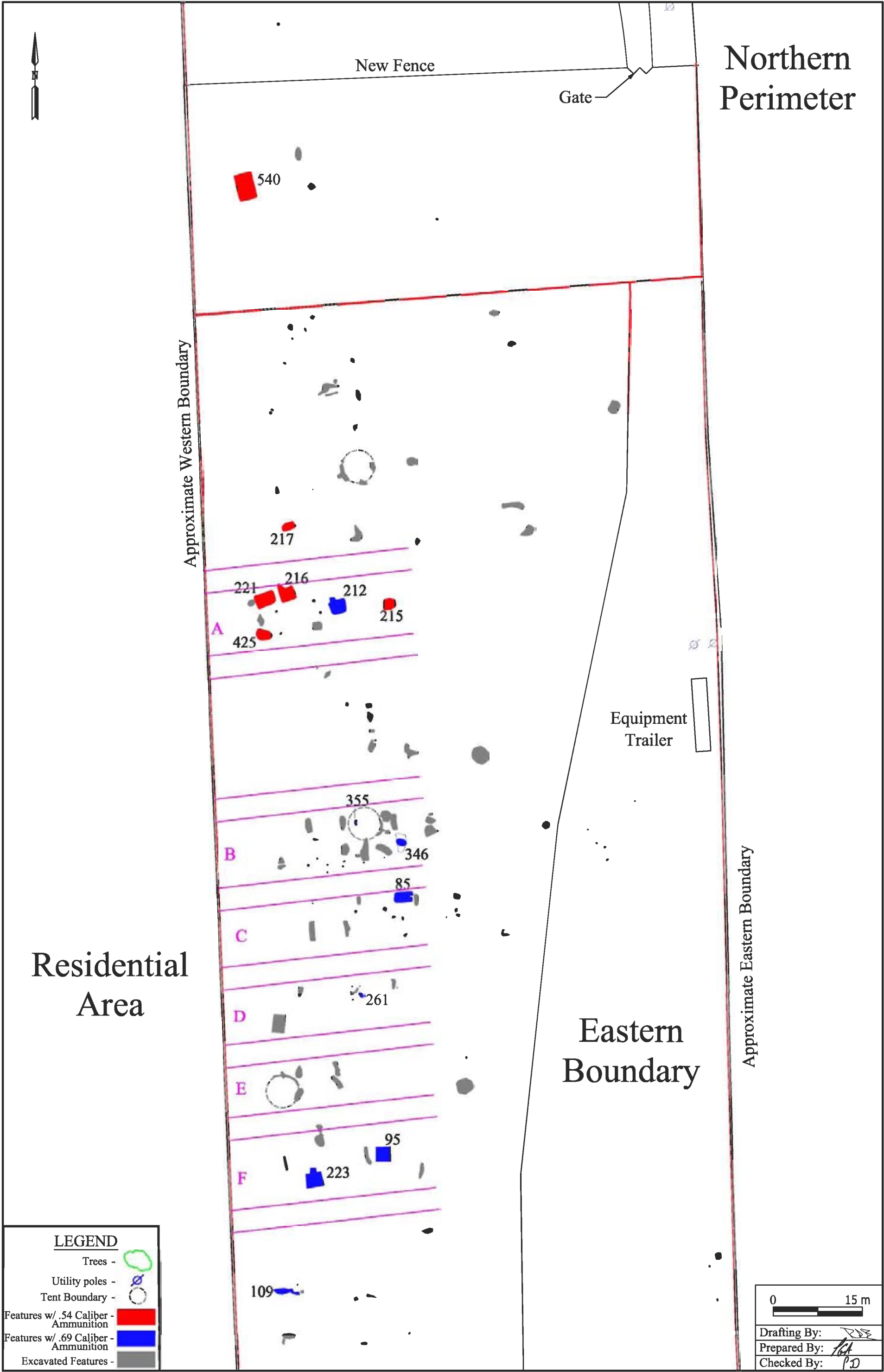


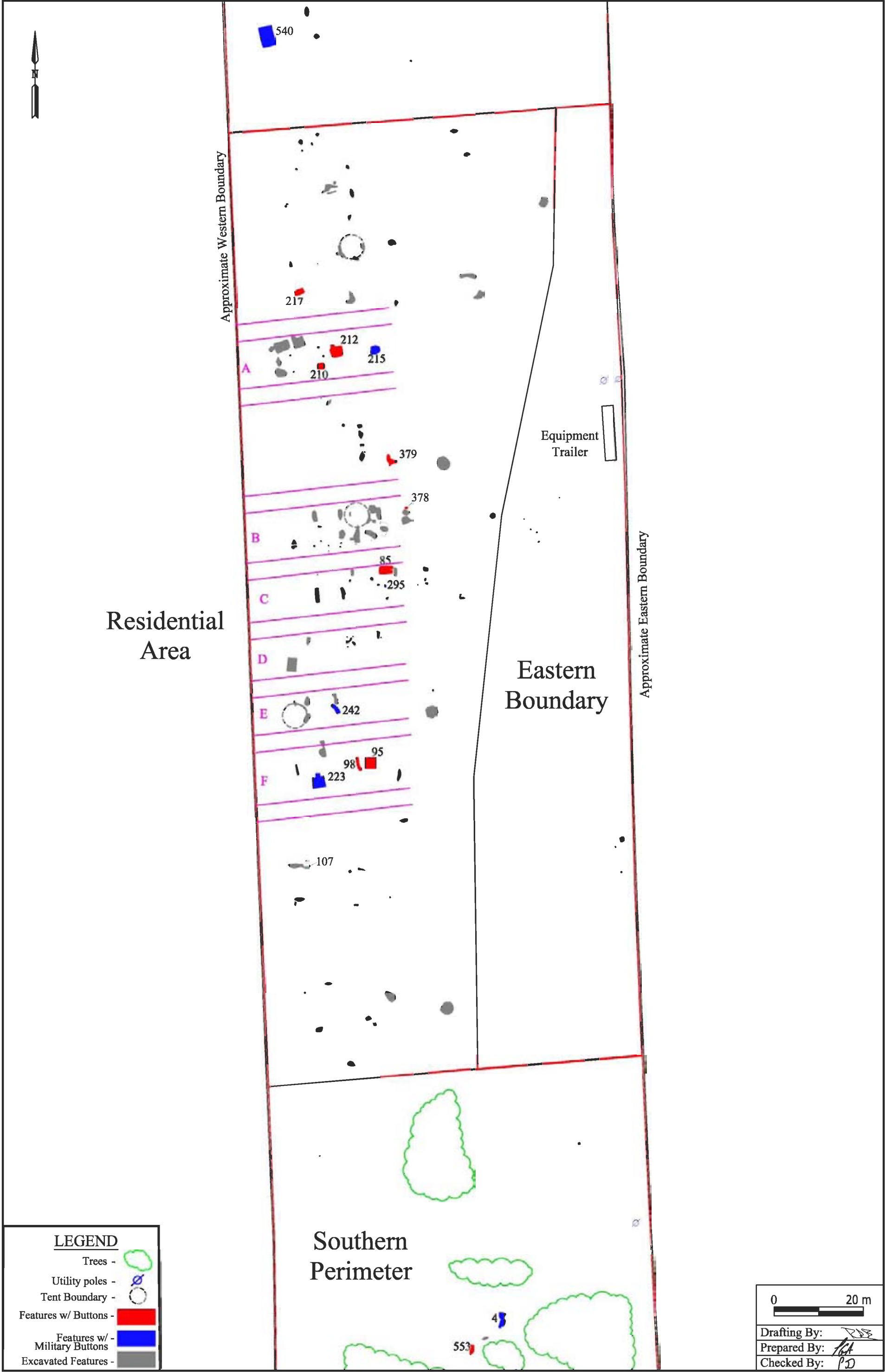
Figure 134. Distribution of .54 caliber and .69 caliber ammunition.

Perimeter (Figure 135). They were most common in structures, but were recovered from pits and slit trenches as well. The distribution of buttons is somewhat skewed due to the relatively large number of buttons (n=22) recovered from the burial contained in Feature 95. These included fabric covered metal coat buttons as well as Prosser undergarment buttons and a single goldstone stud. An examination of just the military buttons reveals a similar distribution. Although they were recovered from Feature 4 in the Southern Perimeter as well as Feature 540 in the Northern Perimeter, they were isolated to single features in Blocks A, E and D within the camp. The variation of button types found within these features is interesting as well. Feature 215, a refuse pit, produced two brass eagle and one South Carolina button while Feature 242, a slit trench, contained a block 'I' (Infantry) and eagle with a 'C' (Cavalry) on the shield. A variety would be expected within these features as buttons were likely disposed of intentionally in either feature, or possibly lost in Feature 242. Feature 223, a large hut, produced two eagle buttons with an 'I' (Infantry) on the shield and a plain eagle. This difference may indicate the habitation of this hut by multiple individuals who had been issued or had traded for different buttons.

The distribution of Kitchen Group artifacts was somewhat more problematic due to the large number of artifacts. In fact, no effort was made to pattern the container glass as it was recovered from every type of feature in every area of the site. Ceramics, however, provided a better opportunity for analysis. The distributions of refined wares (earthenwares and ironstone) and utilitarian stoneware were plotted separately. Refined ceramics were widespread, but were concentrated in the northern area of the site including Block A (Figure 136). All of the wells contained small amounts of refined ware while 10 sherds from a blue transfer ware plate were recovered from Feature 239, a slit trench associated with a possible Sibley tent in Block E. The concentration of these materials in the structures and associated pits in the Block A area may mark a different status between the soldiers who lived on this block as opposed to the others. What this difference might be is unclear. It could be interpreted to mean that these soldiers held a higher status, possibly due to rank, than those to the south. Conversely, it could mean that these soldiers were relatively new recruits that arrived from home carrying their private dinnerware.

Stoneware was much more common than refined wares and was more widely distributed (Figure 137). However, it was concentrated in the northern portion of the camp that includes Block A. Stoneware was recovered from Features 223 and 95, but only single sherds. Two of the wells, Features 518 and 502 both produced stoneware, but these tended to be larger sherds and more complete vessels, such as the nearly complete Chandler jug and the complete jar recovered from Feature 502. The largest number of sherds was recovered from Feature 376, a pit in Block B that produced 162 sherds from a single vessel. Likewise, the 22 sherds recovered from Feature 425 represented two vessels that were deposited in two discrete areas of the feature. What the distribution of stoneware indicates is unclear, although it probably simply means that more of this material was in use on the northern end of the site.

Kitchenware, those items used to store, prepare and consume food, was widely scattered from as far south as Feature 485 and north to Feature 217 (Figure 138). Utensils were



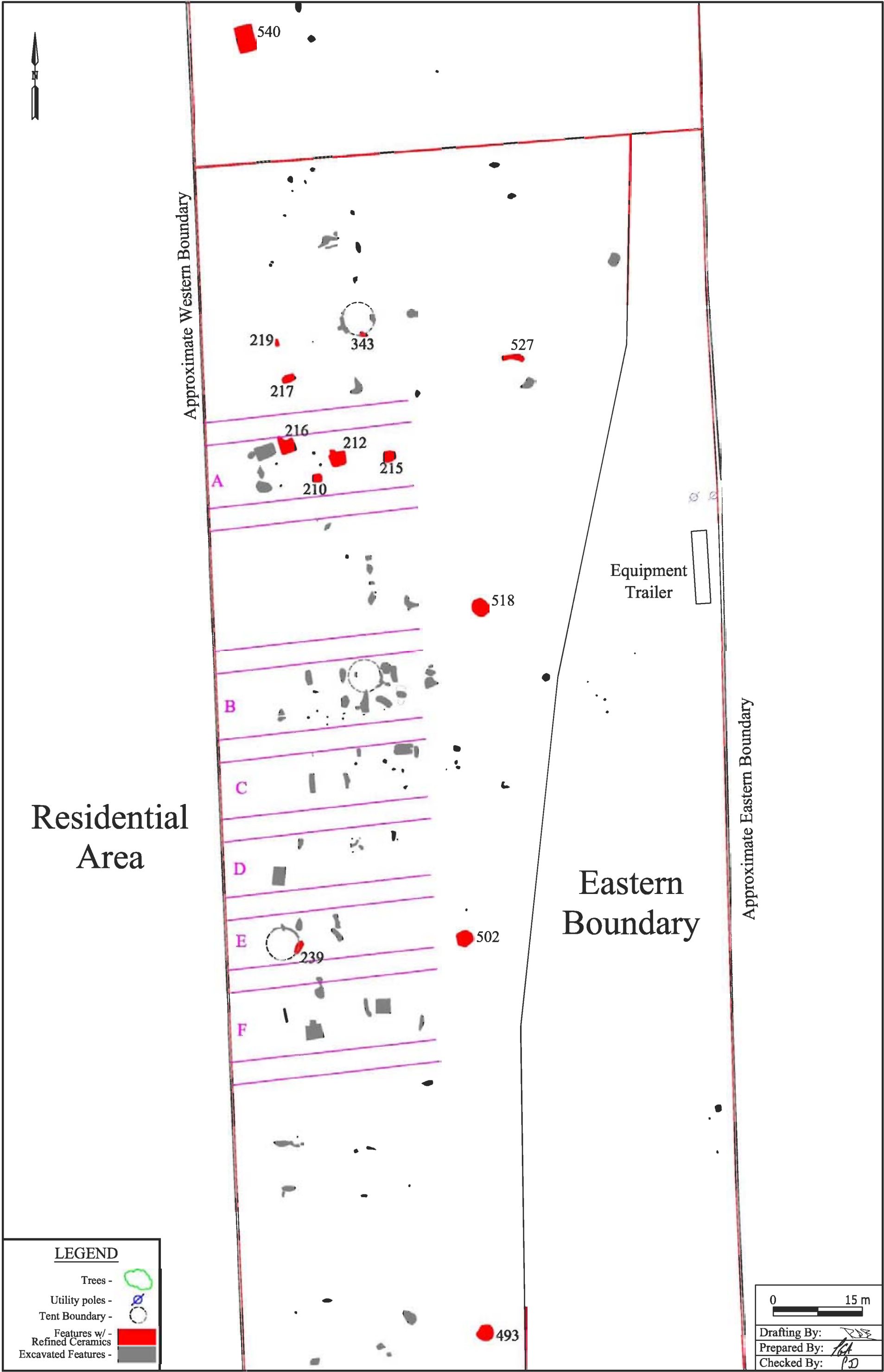


Figure 136. Distribution of refined ceramics.

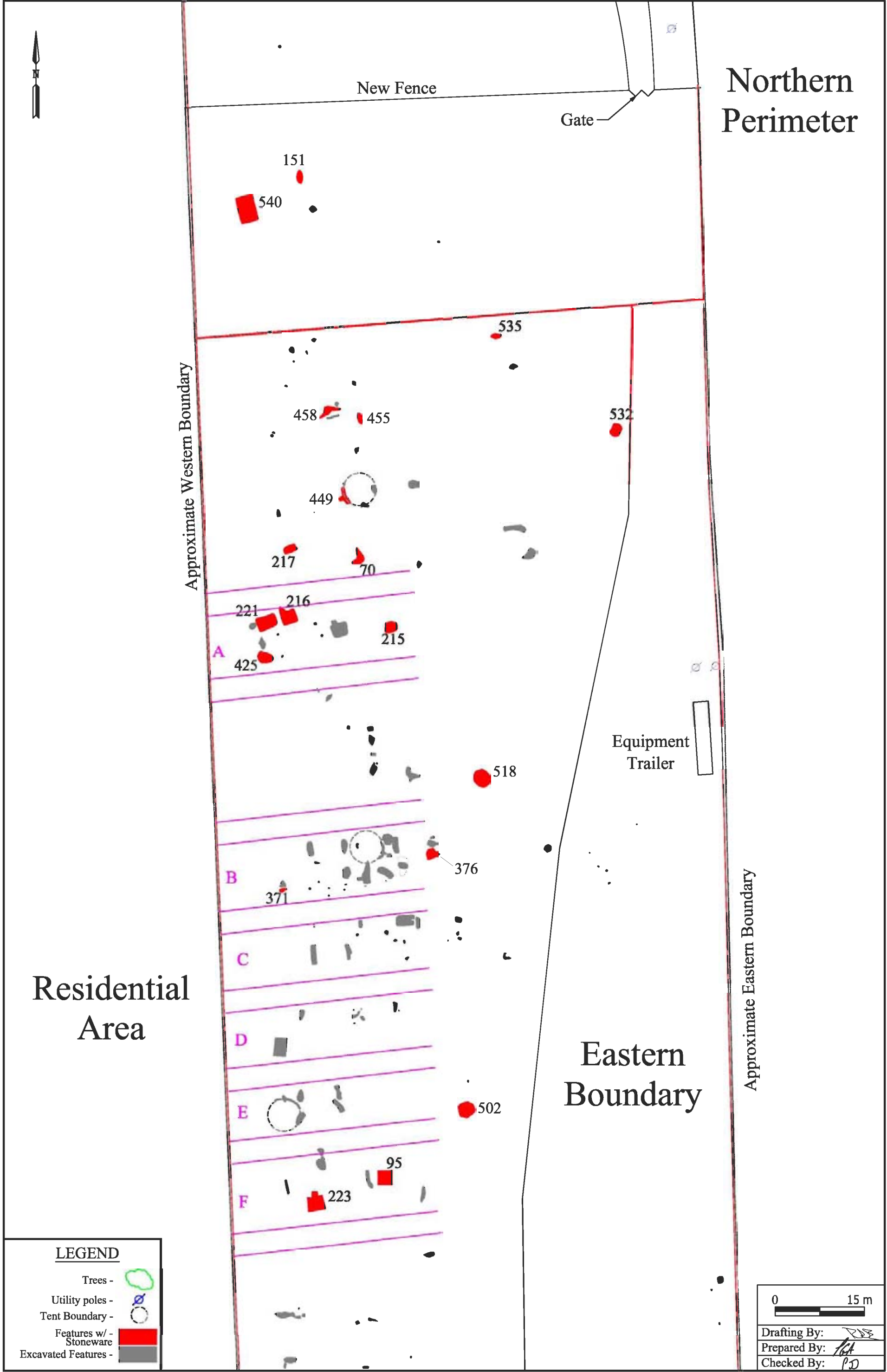


Figure 137. Distribution of stoneware.

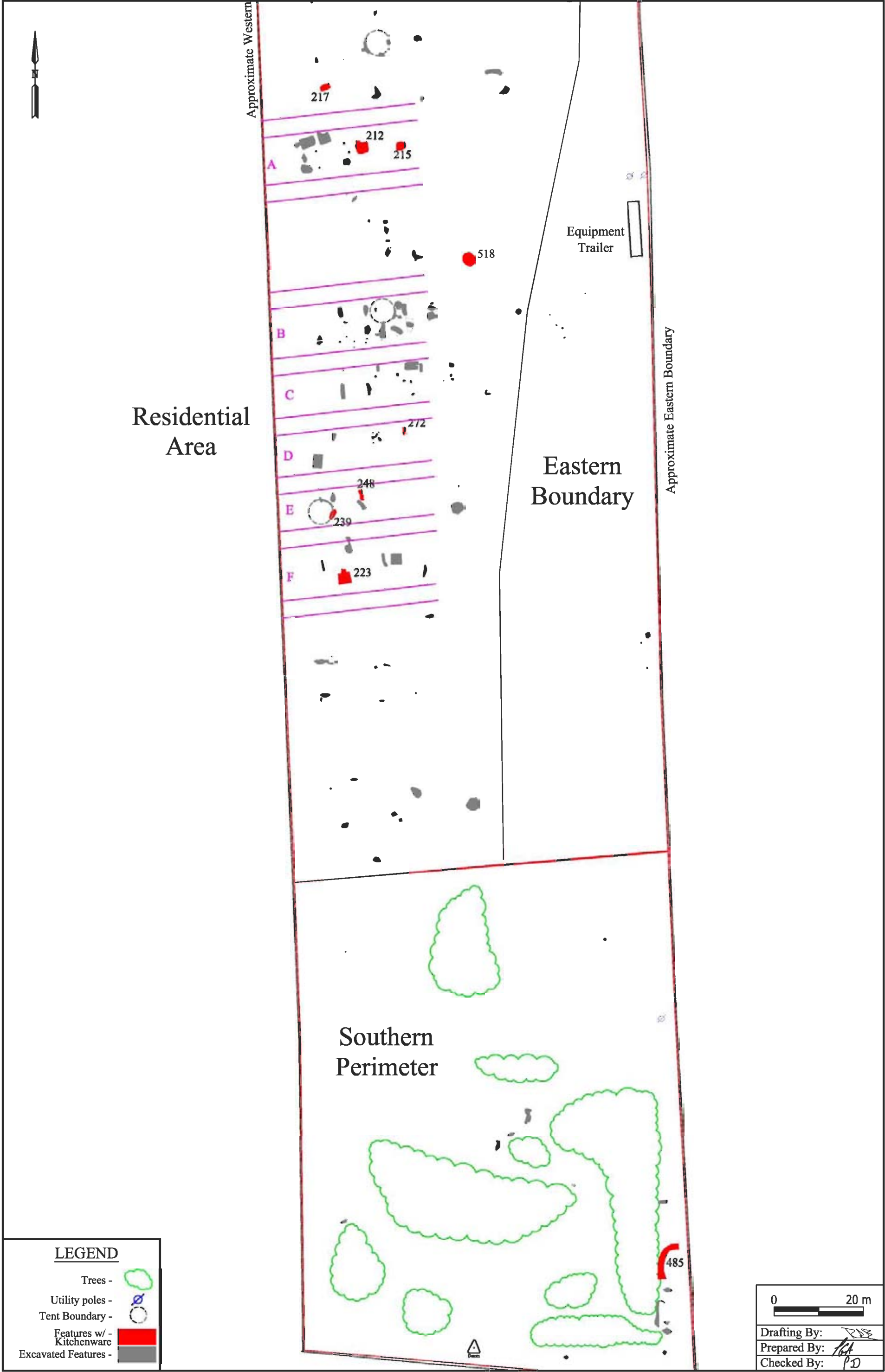


Figure 138. Distribution of kitchenware.

recovered from Features 212, 215, 223, 239 and 248. Most of these were forks or spoons, but a folding corkscrew was located in Feature 223. Two fragments of a kettle or dutch oven were recovered from Feature 217 while a portion of an iron spider skillet was located in Feature 518. The remaining kitchenware consisted of a nearly complete tin can and fragments of another. The actual number of tin cans and other food containers should probably be much higher as a very large number of tin fragments were recovered that could not be identified as to form or function.

Prehistoric Artifacts

Only 228 prehistoric artifacts were recovered during the current excavations. The assemblage consisted entirely of lithic tools and debris and ceramic sherds (Figure 139). Prehistoric materials were widely dispersed over the site and were generally located within features of apparent historical origins. A total of 129 lithic artifacts was recovered while 99 ceramic sherds were located. These materials covered an expansive period of time from the Early Archaic to the Late Woodland/Mississippian Periods.

Lithics

The lithic assemblage included a variety of projectile points, tools and debitage. The majority of these artifacts were flakes (n=105), which accounted for 81.4 percent of the assemblage. Lithic tools included four projectile points, three utilized flakes, three round scrapers, two partial bifaces and one perform.

Four temporally diagnostic projectile points were recovered dating from the Early Archaic, the Middle Archaic and the Late Woodland or Mississippian Periods. The Early Archaic specimens included a relatively large Kirk Corner-Notched (Coe 1964) point made from a light gray rhyolite. This artifact was recovered from the ground surface after the plowzone had been removed. One Guilford, Round Base point, also attributable to the Early Archaic (Coe 1964), was recovered from Feature 447. It was also produced from gray rhyolite. A possible reworked Morrow Mountain point made from gray rhyolite was recovered from Feature 223. The point is small for the type with a narrow, incurvate blade, but it retains the narrow, rounded hafting area typical of the Morrow Mountain type (Coe 1964). It may have been reworked for use as a drill or perforator. Morrow Mountain points are associated with the Middle Archaic Period. The final diagnostic lithic artifact was a small, triangular point made from dark gray rhyolite, which can be attributed to the Late Woodland or Mississippian Period (Coe 1964).

The most common raw material encountered in the lithic assemblage was rhyolite, which accounted for 87.6 percent (n=113) of the material. Rhyolite is a fine-grained metavolcanic stone that ranges in color from very light gray to very dark gray to almost green. The nearest source for this material to the subject site is probably the Great Pee Dee River where it can be found as alluvial gravel washed down from the Uwharrie Mountains in North Carolina (Daniel and Butler 1996). Other materials included quartz (n=9, 7.0%), chert (n=4, 3.1%) and one fragment of quartzite shatter. The raw material of two artifacts could not be identified.



Figure 139. Examples of prehistoric artifacts: Top (l to r), Guilford, Kirk Corner-Notched and a possible reworked Morrow Mountain; Bottom (l to r), Deptford Check-Stamped and Cape Fear Cord-Marked.

Ceramics

The prehistoric ceramic assemblage consisted primarily of undecorated sherds or those that were not large enough or too weathered to determine if a decorative technique had been applied. Eighty-two of these sherds were recovered, accounting for 82.8 percent of the assemblage. Three ceramic phases were represented by 15 decorated sherds. The earliest type recovered was a single sherd of Thoms Creek Punctate. This phase dates to the Late Archaic and represents one of the earliest forms of ceramic technology on the South Carolina Coastal Plain (Sassaman 1993). One Deptford Check-Stamped sherd was recovered, which is associated with the Early to Middle Woodland Period. The majority of the decorated ceramics were associated with the Cape Fear phase and were either Cord-Marked (n=10) or Fabric-Marked (n=3) varieties. Cape Fear ceramics date to the Middle to Late Woodland Period (Trinkley 1990).

The majority of the ceramics were sand-tempered (n=68, 68.7%) while the rest were either grit-tempered (n=21, 21.2%) or tempered with a combination of sand and grit (n=10, 10.1%). Five rim sherds were recovered, one of which was notched and another that was thinned. One of the rim sherds was from the punctuated vessel while another was from a Cape Fear Cord-Marked vessel.

Distribution

As discussed in Chapter 4, only four features were found to be derived from prehistoric activity and these features produced only 18 prehistoric artifacts. Feature 443 was a large, shallow pit that produced one Cape Fear Cord-Marked sherd. It had been disturbed by plowing. Six Cape Fear Cord-Marked sherds and one Guilford projectile point were recovered from Feature 447, which was also a large but shallow pit that had been disturbed by plowing. The presence of the Guilford point and the Cape Fear ceramics in the same feature is problematic in that the former is associated with the Early Archaic and the latter with the Middle to Late Woodland Period. Given the historical disturbance of the feature, it is likely that the projectile point was intrusive into a Woodland-age feature. Feature 451 was a large pit filled almost entirely with calcined animal bone. Two rhyolite flakes and two Cape Fear Cord-Marked sherds were also recovered, indicating that this feature could date to the Middle to Late Archaic Period. Feature 471 was another large but shallow pit heavily disturbed by prehistoric plowing. One banded rhyolite flake, two undecorated grit-tempered sherds and three undecorated sand-tempered sherds were recovered.

The remaining prehistoric artifacts were scattered across the site and were either recovered from features of apparent historical origins or from the ground surface. The two trenches excavated in the southeastern corner of the project area, Features 485 and 486, produce the most prehistoric material. Twenty-two flakes and 19 ceramic sherds were recovered from Feature 485. The ceramics included one Deptford Check-Stamped sherd and one fabric-marked sherd. The Deptford phase is affiliated with the Early to Middle Woodland Period. Feature 486 produced 14 flakes, four fragments of shatter and one sand-tempered ceramic sherd. It is likely that these materials were deposited in these features by the erosion of the surrounding matrix or through plowing. This is likely true for many of the other historic

features that contained prehistoric artifact, although it is possible that some of the materials were gathered by soldiers. For example, the Morrow Mountain projectile point described above was recovered from Feature 223, which has been interpreted as a residential structure. It is possible that one of the inhabitants of the structure picked up the point and kept it as a curiosity.

The low density and scattered nature of the prehistoric artifacts precludes any further discussion of this component. It is likely that the area was utilized for short periods of time by small groups as they traveled through the area. It is possible that groups utilizing the resources around Jeffries Creek to the south camped on or near the project area. Otherwise there is no evidence to suggest that any prolonged habitation or activity took place on the site prior to the Historic Period.

CHAPTER 6. BURIAL REPORT

Nicholas P. Herrmann

TRC (Grunden and Holland 2005) identified Feature 95 and Burial 1 during Phase II testing of the Florence Stockade (38FL2). At the time, TRC determined that one adult individual was present, but it was unclear if additional individuals were present in Feature 95 or other areas of the site. The boundaries of Feature 95 extended beyond backhoe trench limits. Grunden and Holland (2005) suggest that numerous graves were present at the site based on historical records and state that “there are almost certainly more bodies contained within the unexposed portions of the trench” (Grunden and Holland 2005:35).

As part of MACTEC’s mitigation plan, the author was contracted from the University of Tennessee’s Archaeological Research Laboratory to excavate and analyses any human remains found during archaeological investigations. Stripping of the site resulted in no additional burials beyond the individual found by TRC during the Phase II testing. The following report summarizes the excavation and the laboratory analysis of the human remains. Associated artifacts recovered during excavation will be briefly described and inventoried but these items will be analyzed in detail in a separate section of the site report (see Artifact Analysis). Excavation of Burial 1 began on 3 May 2006 and was completed 6 May 2006.

Feature 95 and Burial 1 Description

After scraping the area around Burial 1, the MACTEC field crew delineated the boundaries of Feature 95. The feature was similar to other shallow semi-square to rectangular pits previously identified during mitigation (Figure 140). Tentatively these features have been interpreted the subterranean portions of winter habitation or storage huts. The pit was bisected along east-west and north-south lines and the resulting quadrants were excavated separately (Figures 141 and 142). Profiles of the first two quadrants (NW and SE) were drawn and photographed. Each quadrant extended to sterile sand at a depth of 10 to 15 cm below the scraped ground surface. Burial 1 occupied only the north-central portion of the feature and no additional burials were found in the pit.

The body is supine with the legs extended and the right arm flexed towards the head. The left arm is slightly flexed but extends to the left hip. The vertebral column curves slightly to the burial’s right and the legs and feet are rotated right. The thorax is positioned at the base of the pit. The long bones lie 2 to 5 cm above the base. Sandy soil below the bones is discolored and darker than the surrounding pit fill. The entire pit exhibits mottling related to bioturbation of the shallow pit feature (Figure 143).

Three distinct plow scars are evident along the northern boundary of the pit and the upper portions of the pit have been truncated by plowing (Figure 144). The burial was damaged as a result of these activities. No cranial bones were identified during the burial excavation, but cranial fragments were found in the scraped back dirt. These elements



Figure 140. Feature 95 and Burial 1 viewed from the southeast.

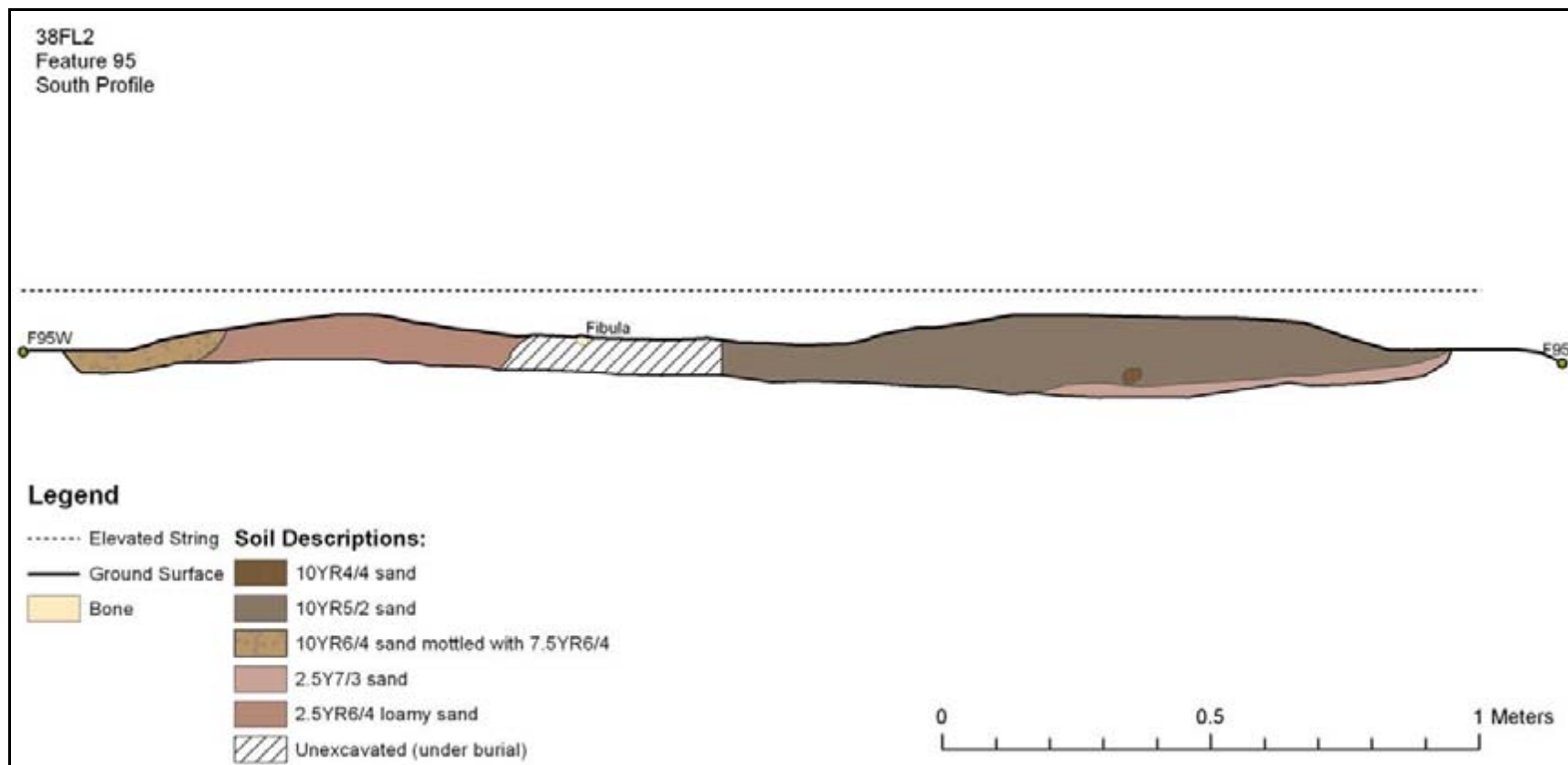


Figure 141. South profile of Feature 95.

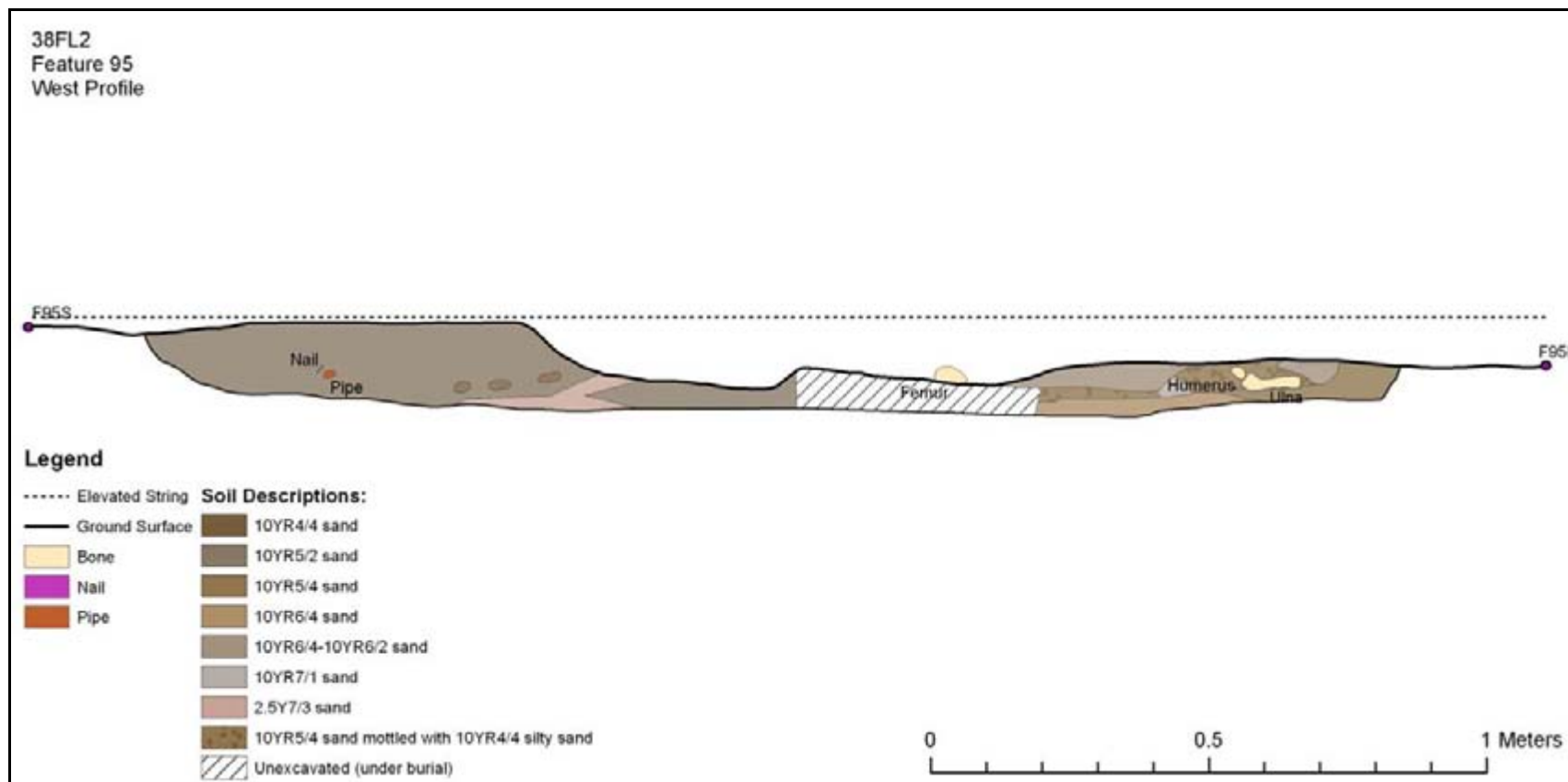


Figure 142. West profile of Feature 95.



Figure 143. Overview of Burial 1 in Feature 95.

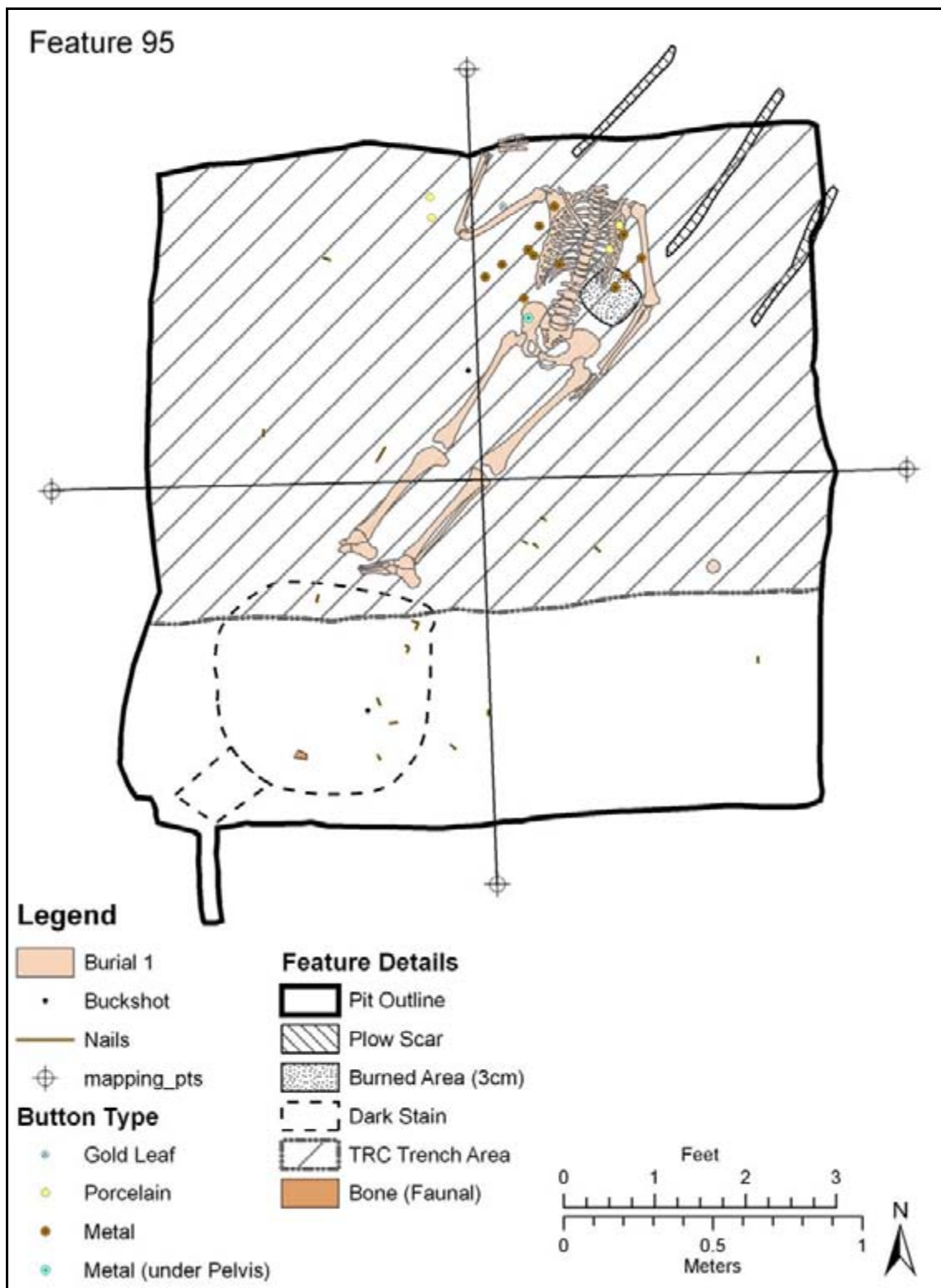


Figure 144. Plan map of Feature 95 and Burial 1.

probably originated in the plow zone near the feature and were re-deposited during scraping. One tooth fragment was recovered at the north end of the feature near the vertebral elements. A small bone concentration was found in the southeast quadrant of the pit but it could not be positively identified as human. This fragment is likely faunal.

A small shallow burned area is near the left arm and chest. The area exhibits a higher concentration of charcoal. The discoloration was evident in the TRC photographs of the feature and appears to be intrusive from the plow zone (Grunden and Holland 2005:30). The bones below the disturbance are unmodified and show no sign of heat alteration. In addition, a dark semi-circular stain encompasses the southwest quadrant of the pit and numerous nails, burnt animal bone and charcoal fragment are present. The nails are both clinched and unclenched. The discoloration ends near the feet of Burial 1 and stain does not appear to be associated with the burial.

Associated Artifacts

Artifacts recovered from Feature 95 and in association with Burial 1 will be described in detail elsewhere, but a brief discussion concerning these artifacts is presented to clarify grave associations. Numerous nails were found in Feature 95 and some were in close proximity of Burial 1. These nails do not appear to form a specific pattern such as would be expected for a coffin. The nails appear to relate to the structure and possibly the disturbance in the southwest quadrant of Feature 95.

Several small buckshot lead balls and at least one large caliber shot were recovered from the feature. Only one was in close proximity to the burial. The single shot was found slightly west and below the right femur (Figure 145). The shot is unmodified and no damage to the femur is evident. It is unclear if the shot is associated with the burial.

Numerous buttons are in direct association with the burial and probably relate to a jacket and shirt worn by the individual when they were placed in the pit. In all, 12 round rusted metal buttons, 4 round Prosser Molded buttons, and one small round decorated black button were found with the burial (Figure 146). The rusted metal buttons align in two to three rows across the chest and below the right arm. These buttons probably were part of a military jacket, but no embossing or recognizable pattern is event on the surfaces. The Prosser buttons were found in pairs near the right arm and on the left side of the chest. Positioning of the buttons does not specifically identify the type of clothing to which they were attached, but it is likely a shirt. The small black molded button or pendant was found near the right humerus (see Figure 146).

Burial Analysis

The following section summarizes the analysis of Burial 1. The methods employed during the analysis are briefly outlined and the results of the analysis are presented in two sections: Demography and Pathology.



Figure 145. Buck shot near right femur of Burial 1 in Feature 95.

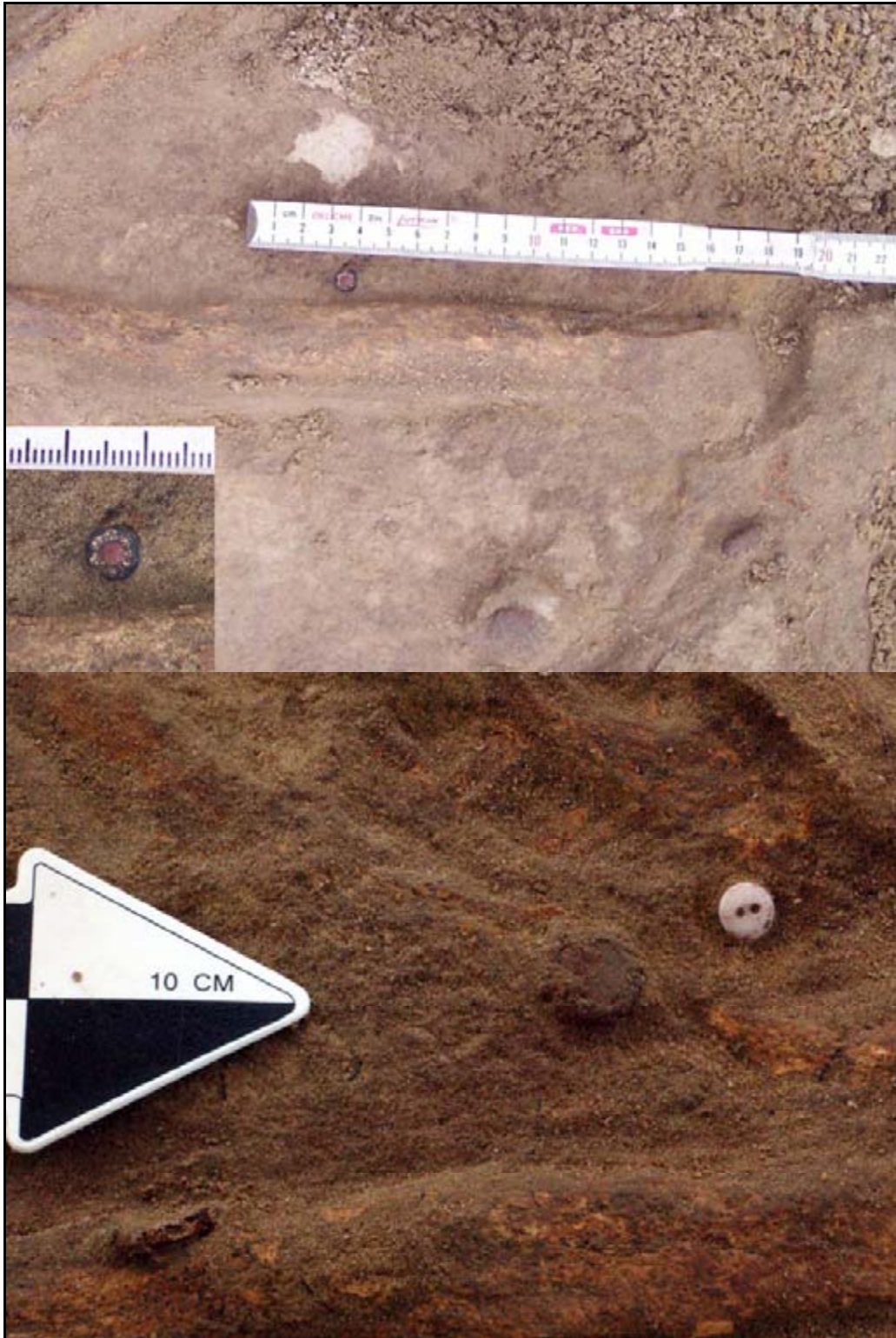


Figure 146. Button examples from Burial 1 *in situ* with close-up of the decorative black button.

Methods

The analysis of Burial 1 followed the protocols established in the Standards (Buikstra and Ubelaker 1994). Due to the poor state of preservation of the skeletal material, observations and metric recording was initiated during excavation and as much information from the skeleton was collected prior to removal. After removal and drying, the bone became brittle and fragmented easily. The postcranial metric collected as part of this study are provided in Appendix A. Postcranial measures were collected according to the methods described in Zobeck (1983).

Inventory

A basic visual inventory of Burial 1 is presented in Figure 147. The skeleton is nearly complete but most elements are fragmentary. The only cranial elements recovered were two small fragment located outside the feature. Smaller hand and foot bones are missing or could not be specifically identified. Fragments of the lower vertebra were identified in situ, but several of the upper thoracic or cervical vertebrae could not be identified or were damaged by plowing. One tooth root fragment with a completed apex was recovered during excavation. The fragment represents the lower half of a maxillary molar root.

Demography

Age

Due to poor preservation and a lack of cranial material the age estimate of this individual is based on limited criteria. All observable joint surfaces exhibit clean margins and lack any evidence of osteoarthritis. The anterior thirds of both auricular surfaces are present, and the apex is rounded and unmodified. Both auricular surfaces are damaged but small undamaged areas of the surface appear fine grained. The combination of these traits suggests a young adult between 20 and 35 years old at death.

Sex

Overall the skeleton is robust. Metrically the individual classifies as male based on long bone lengths and femoral head diameter using Fordisc 3.0 (Jantz and Ousley 2005). Morphological observations include marked muscle attachments, large joint surfaces, and a narrow sciatic notch (coded as 5 based on the Standards). The combination of metric and morphological traits support a male sex estimate.

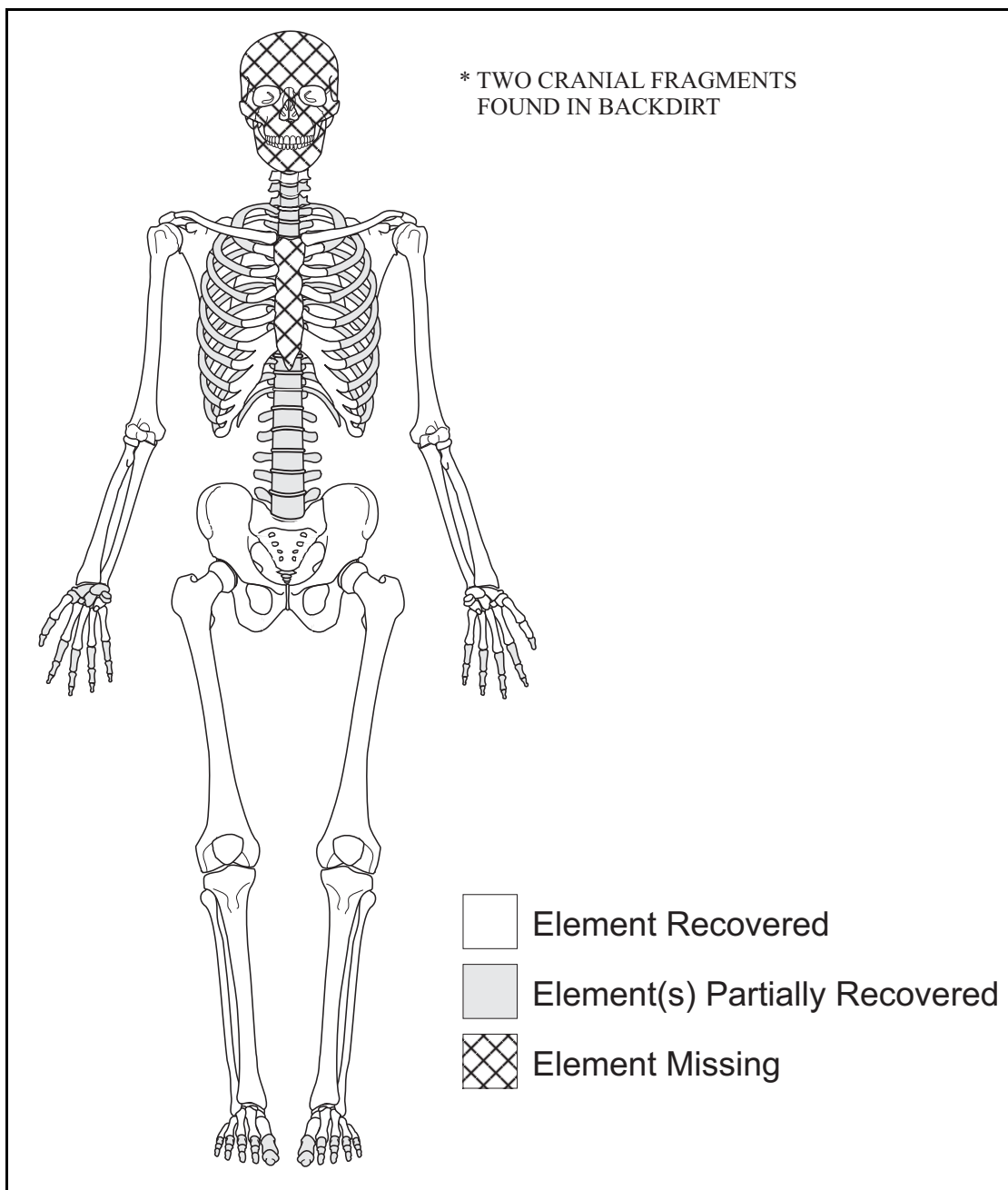


Figure 147. Visual Inventory of Burial 1 from 38FL2.

Ancestry

The ancestry of this individual is difficult to determine based only on morphological features. Given the lack of cranial and dental structures, the assessment of ancestry is based on postcranial metrics. A summary of these measures is provided in Appendix C.

The available measures are limited and the analysis focuses on select measures that were available in the lab combined with maximum long bone lengths taken in the field. Using Fordisc 3.0 (Jantz and Ousley 2005), measurements were used to create a custom discriminant function formula using only white and black males from the Terry Collection and excluding individuals from 20th century forensic cases or modern donations. The Terry Collection individuals were selected because most have mid to late 19th century birth dates and as such represent a better comparative sample to Burial 1. The discriminant function analysis uses eleven measures (FEMCIR, FEMHDD, FEMMAP, FEMMTV, FEMSAP, FEMSTV, FEMXLN, FIBXLN, HUMXLN, RADXLN, and TIBXLN) to classify the two samples as well as the unknown individual from Burial 1. The discriminant correctly classified 81.4% of the test sample using cross validation. Burial 1 is classified as a white male but the postcranial morphology does fall within the variation of black males and is not atypical of either white or black populations.

Stature

Using the 19th Century Terry Collection long bone data within Fordisc 3.0, the stature estimate for this individual is 71.1" +/- 2.9 (95% range from 68.1 to 74.0 inches) where $\text{stature} = 0.058 (\text{FEMXLN} + \text{FIBXLN}(893 \text{ mm})) + 19.43 \text{ in} = 71.1 \text{ in}$. This formula is based on white males from the Terry Collection. The individual is in the upper end of the stature range for 19th Century white males. For example, the mean stature for Civil War period white recruits was 68.5 in (Cuff 2005:26). Rathbun (1989:A-3) calculated an average stature of 66 inches for Union soldiers of African ancestry at Folly Island. The Folly Island sample matches well with contemporary historical records for Americans of African ancestry (Cuff 2005:26).

Pathology

No specific pathological lesions were identified in this individual. The poor preservation of the cervical and thoracic vertebral elements and missing skull narrowed the observable surfaces. All long bone joint surfaces were at least partially present, but none exhibited lesions. The lower vertebral column is present. The superior and inferior facets are clear and the posterior centra show no osteophytosis and osteoarthritic changes. The lack of pathological lesion suggests that the individual is relatively young.

Isotopic Analysis

In order to investigate the residential and dietary history of Burial 1, a bone sample from the left femur was submitted to Dr. Hong Wang at the Illinois State Geological Survey (ISGS) to perform isotopic analysis. Dr. Wang successfully extracted both the collagen and apatite fractions following methods detailed in Balasse et al. (2002). Carbon, nitrogen, and oxygen isotopes were examined in this study. The collagen sample was analyzed by the ISGS for carbon and nitrogen. The apatite fraction was sent to the Stable Isotope Facility at the University of Wyoming for analysis of carbon and oxygen.

Carbon and nitrogen provide critical data on diet (Ambrose and Norr 1993). Carbon isotopes ($\delta^{13}\text{C}$) have been used extensively to address questions of corn (C4) and crassulacean acid metabolism (CAM) plant consumption in prehistoric and historic populations. The differences in carbon isotopic signatures relate to the specific photosynthetic pathway in various plants (C3, C4, or CAM). The changes in the nitrogen levels ($\delta^{15}\text{N}$) typically relate to consumption of marine species. The higher proportion of aquatic/marine species in the diet and the inclusion of species from higher in the aquatic food chain (i.e. increases in trophic levels) will generally increase nitrogen levels in human bone.

The examination of the apatite fraction from bone and enamel provides additional data on diet and specifically can provide information on residential history of the individual. Oxygen ($\delta^{18}\text{O}$) and strontium (Sr) are two excellent isotopes to examine within the apatite sample. However, strontium is diagenetically unstable in bone and this isotope was not analyzed. The value of $\delta^{18}\text{O}$ relates to the available water in the location where the person lived for any duration of time. Oxygen is diagenetically stable within the apatite sample and has been well documented across the United States and the world (Hedges et al. 2005; Bowen et al. 2007). The distribution of modern oxygen can be used as a proxy for 19th century levels. A comparison of dental enamel and bone samples can provide researchers with insight into the residential history and migration of the individuals by comparing the isotopic ratios of these two hard tissues (White et al 1998; Schwarcz 2007; Bowen et al 2005a).

Results

The stable isotope values from Burial 1 indicate an individual that consumed a diet high in corn-fed meats, corn, or tropical grass species like sorghum (another C4-based plant) (Figures 148 and 149). The $\delta^{13}\text{C}$ value from the collagen fraction equals -11.0‰ and $\delta^{15}\text{N}$ value from this fraction equals 10.5‰. The C/N ratio is 3.027 indicating that the collagen extraction is good. A comparison of the apatite and collagen carbon values suggests a mixed diet, heavily dependent on corn or other C4 plants. The increase in the nitrogen scale may suggest a slight marine dietary component. Based on the $\delta^{18}\text{O}$ analysis this would be consistent if the individual lived along the Gulf or Atlantic coast.

The corrected $\delta^{18}\text{O}$ value from the apatite fraction is equal to -3.93. The geographic range for $\delta^{18}\text{O}$ in the continental U.S. is shown in Figure 150 (with ± 1 V-PDB). Oxygen isotopic data is derived from studies by Bowen et al (2005b; see also Bowen and

Revenaugh 2003) and the GIS grids were acquired from <http://www.waterisotopes.org>. The observed isotopic distribution conforms nicely to the Gulf coast and along the southeastern Atlantic coast into South Carolina. These results suggest that individual lived in the southern US for years prior to the Civil War and likely lived in the region throughout the war. The bone sample represents roughly the last 10 to 15 years prior to death. Dental remains would be more age restrictive but no enamel was available from Burial 1.

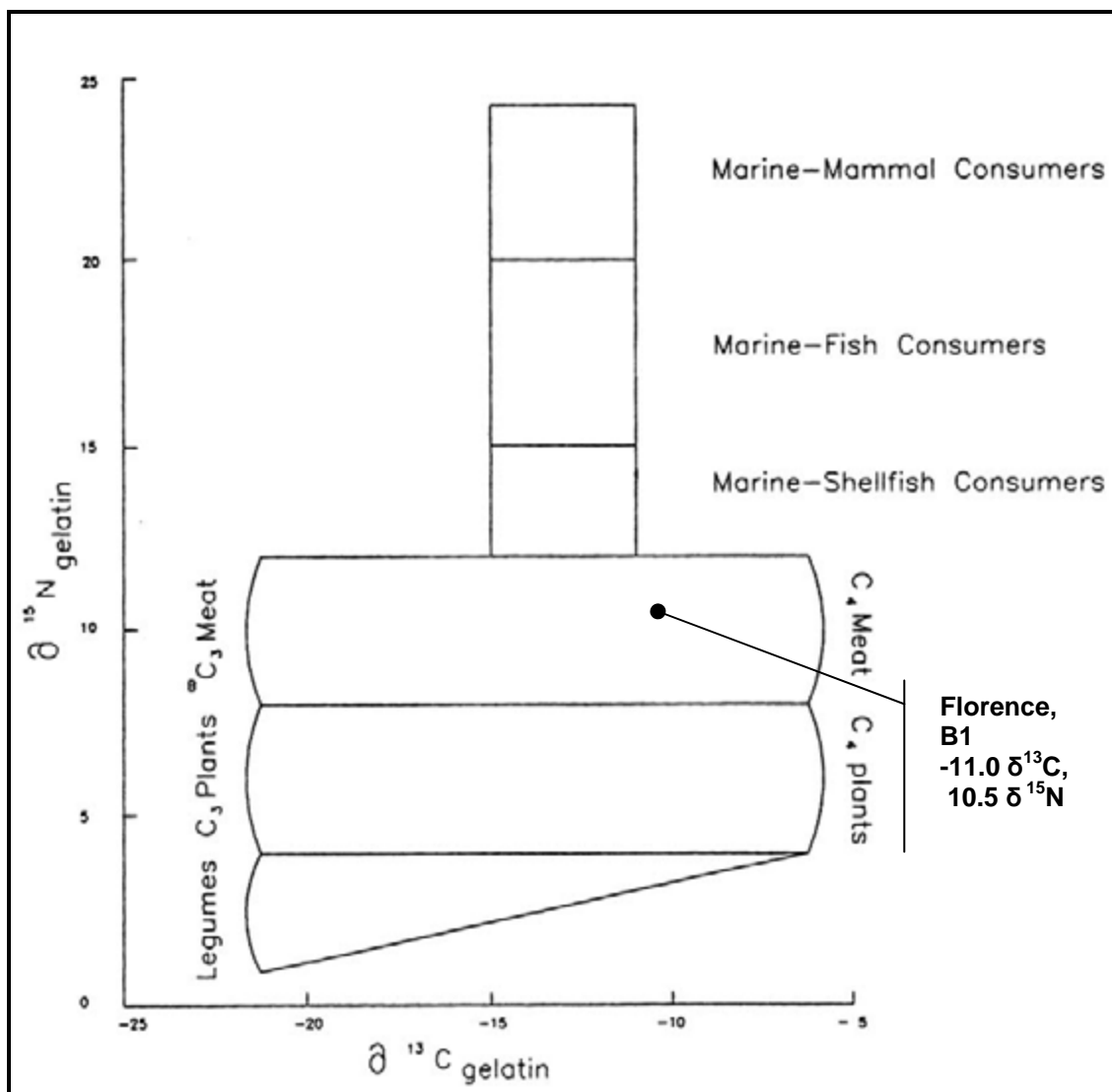


Figure 148. Composite stable isotope model for diet based on $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$.

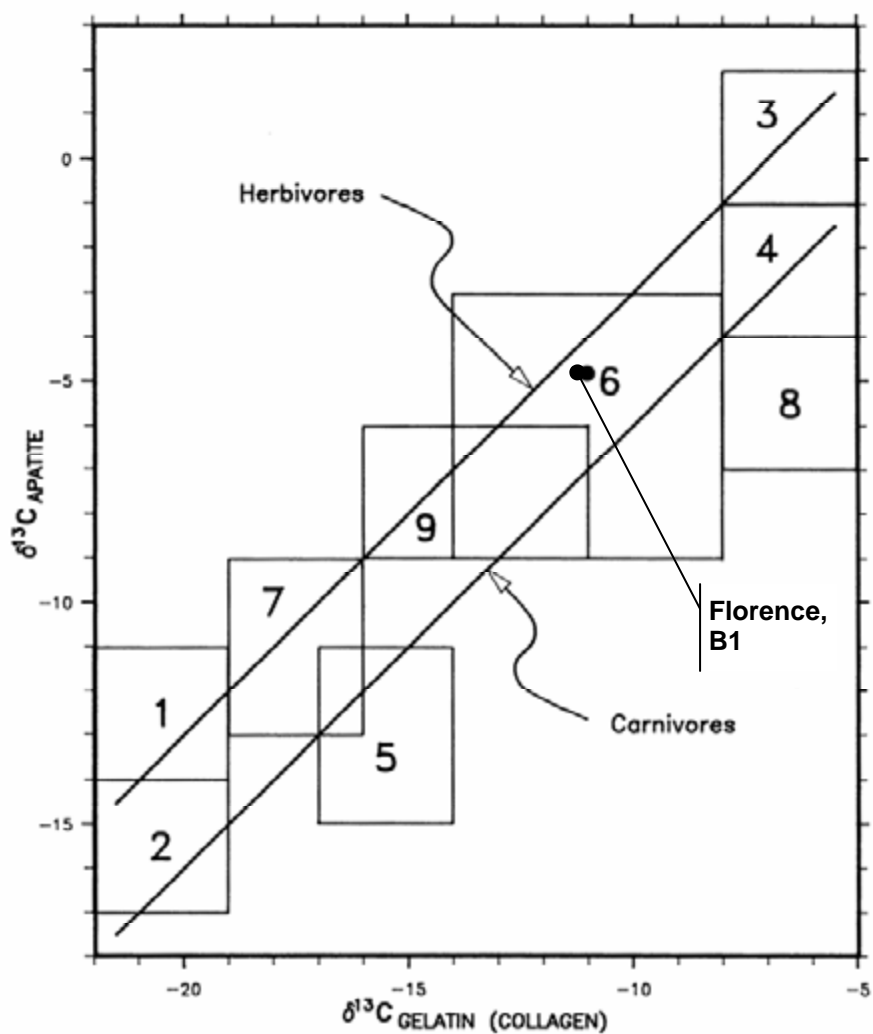


Figure 149. Plot of carbon isotopic pattern for collagen and apatite fractions from Burial 1. Proposed dietary groups: 1, C-3 plants; 2, C-3 plants and C-3 meat; 3, C-4 plants; 4, C-4 plants and C-4 meat; 5, marine only; 6, mixed, mainly maize; 7, C-3 plants and marine; 8, C-3 plants and C-4 meat; 9, CAM plants and C-3 meat. Figure adapted from Krueger and Sullivan (1984), Huebner (1991) and Bement (1994:100).

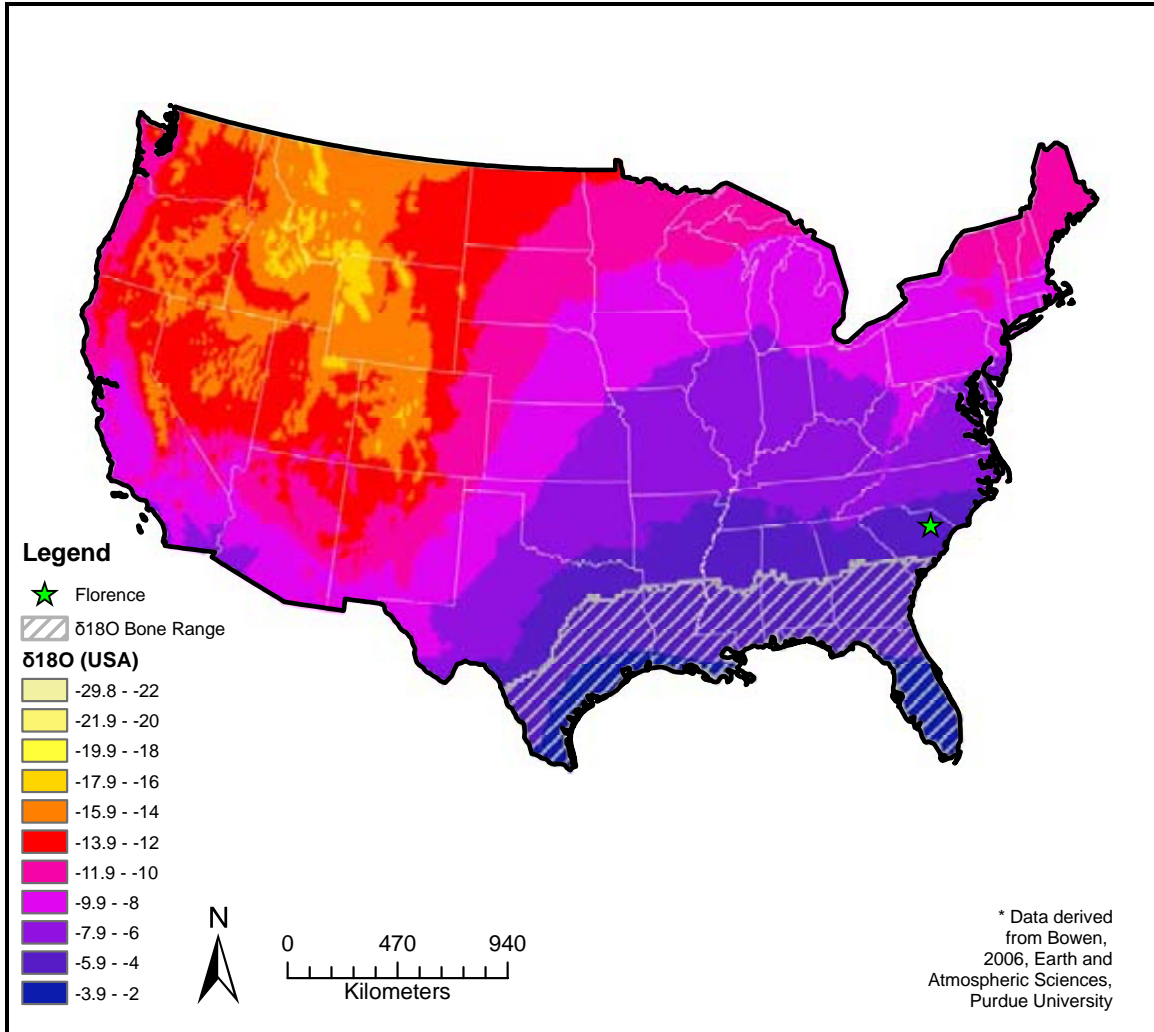


Figure 150. Oxygen isotope map of the United State (data from Bowen et al. 2005a, 2007). Area of possible origin based on $\delta^{18}\text{O}$ value is highlighted.

Discussion and Conclusion

The burial from Feature 95 represents a young adult male of indeterminate ancestry. The artifacts associated with the burial are typical of Civil War period burial practices and clothing. The placement of the individual within an abandoned structure suggests that this individual was different from the other soldiers buried at the Florence Stockade site. The Union soldiers were either buried in trenches which now occupy the National Cemetery north of the site or were placed in the original one acre cemetery containing 416 men (Grunden and Holland 2005:13). Burial 1 is the only individual encountered during the current investigation. The isotopic data suggests that the individual resided in the southern US prior to death. In addition, the carbon and nitrogen isotopic signatures suggest a corn or C4 plant dependent diet. It is likely that the individual

consumed corn-fed meats, corn-based foods (such as corn meal), and possibly sorghum. Additional testing for DNA may clarify the ancestry issues associated with this individual.

CHAPTER 7. FAUNAL REMAINS

Judith A. Sichler

A small sample of vertebrate remains recovered from Civil War era occupations at the Florence Stockade (38FL2) located in Florence County, South Carolina, was identified at the Archaeological Research Laboratory (ARL) at the University of Tennessee using modern comparative collections. The remains from 38FL2 were recovered from contexts associated with the Confederate occupation of a stockade housing Union prisoners of war from September 1864 to February 1865 (Appendix D). The assemblage includes 833 bone fragments with a total weight of 1580.88 grams; a minimum of five individuals (MNI) are represented. The collection is primarily composed of mammalian and avian taxa, especially domesticated cow and pig, and domestic chicken. Table 9 lists proveniences from 38FL2 from which faunal remains were recovered and identified.

Materials and Methods

Initial sorting and classification of faunal remains was done to the most specific taxonomic level as possible. The taxonomic nomenclature used for vertebrates follows the Petersons Field Guides (e.g. Burt and Grossenheider 1980; Conant and Collins 1991; Page and Burr 1991; and Peterson 1980). Other information recorded includes element, side, portion, fusion, and whether any modification was noted on the bone.

When identification was limited to class, a size category was assigned when feasible. ARL faunal protocol for mammals is as follows. Large mammals are those represented by wild taxa such as white-tailed deer (*Odocoileus virginianus*) and black bear (*Ursus americanus*) and domestic taxa including cow (*Bos taurus*), pig (*Sus scrofa*), and horse (*Equus caballus*). Representative of medium/large-sized category include animals referred to as canids (*Canis* spp.), primarily the coyote, wolf, and dog. Domestic taxa in the medium/large-sized category include sheep (*Ovis aries*) and goats (*Capra hircus*). Medium-sized mammal category include wild taxa such as foxes (*Urocyon cinereoargenteus*- gray fox and *Vulpes fulva*- red fox), beaver (*Castor canadensis*), and raccoon (*Procyon lotor*). Medium-to-small mammals include wild taxa such as cottontail rabbit (*Sylvilagus floridanus*), opossum (*Didelphis marsupialis*), woodchuck (*Marmota monax*), and skunk (*Mephitis mephitis*). Examples of small-sized mammals include squirrels (*Sciurus* sp.) and Old World rats (*Rattus* sp.). Very small-sized mammals are represented by taxa such as mice, voles, and bats. Similar size classes are used when discussing bones attributable only to class Aves, the birds. Large-sized birds are represented by turkey (*Meleagris gallopavo*), large raptors (hawks and eagles), and large geese. Medium-sized birds include ducks and owls and the domestic chicken (*Gallus gallus*). Smaller-sized birds are represented by jays, warblers, and buntings, primarily the passerines or song-birds.

Table 9. Site 38FL2 Proveniences Analyzed.

Provenience	Feature	Collection Method	Count	Weight (g)
017	210	floatation sample		8.87
021	210	0.25 inch screened		247.62
		subtotal Feat. 210	39	256.49
002	211	0.25 inch screened		3.84
003	211	floatation sample		0.32
		subtotal Feat. 211	7	4.16
014	212	0.25 inch screened		1.87
019	212	0.25 inch screened		1.18
022	212	floatation sample		0.55
		subtotal Feat. 212	12	3.60
027	215	0.25 inch screened		330.62
028	215	floatation sample		0.45
029	215	floatation sample		36.56
031	215	0.25 inch screened		34.44
		subtotal Feat. 215	440	402.07
026	216	0.25 inch screened		47.03
034	216	floatation sample		0.01
036	216	0.25 inch screened		3.30
037	216	floatation sample		0.45
		subtotal Feat. 216	28	50.79
405	221	0.25 inch screened		4.52
		subtotal Feat. 221	1	4.52
394	399	0.25 inch screened		48.64
		subtotal Feat. 399	1	48.64
395	400	0.25 inch screened		127.69
		subtotal Feat. 400	14	127.69
411	425	0.25 inch screened		255.00
423	425	floatation sample		0.31
429	425	0.25 inch screened		151.28
454	425	floatation sample		0.35
462	425	floatation sample		0.01
468	425	0.25 inch screened		221.24
469	425	floatation sample		0.21
486	425	floatation sample		0.20
487	425	floatation sample		0.72
488	425	floatation sample		5.41
489	425	floatation sample		23.91
490	425	floatation sample		8.97
493	425	0.25 inch screened		15.31
		subtotal Feat. 425	291	682.92
		Total Weight	833	1580.88

Minimum Numbers of Individuals (MNI) and Number of Identified Specimens (NISP) were calculated as a basic method of quantifying the assemblage. As stated by others, both MNI and NISP have their shortcomings (Breitburg 1991; Grayson 1979, 1984; Klein and Cruz-Urbe 1984; Ringrose 1993). MNI is calculated by looking at paired skeletal elements. First introduced by White (1953), it is done by separating the most abundant elements into their left and right sides and using the largest number as the unit of calculation. The measure can be further refined by assessing age and size variables (Grayson 1979). With MNI, the greatest problem deals with aggregation. The criteria used to aggregate a site affect the calculation of MNI. The more divisive the contexts, such as strata, arbitrary levels, time periods, or features, the closer the MNI values will approach NISP values (Grayson 1979, 1984; Reitz and Scarry 1985). However, if the contexts are not mixed and the aggregation units can not be further divided, the MNI values may actually be more representative of actual individuals brought back to the site (Grayson 1984:67). Other problems with MNI include the assumption that the entire animal was consumed at the site, with the animal being represented by the identified element. This may or may not be the case, as indicated by butchery, exchange behaviors, or market evidence. By examining element distribution from the assemblage, the evidence can be evaluated. Another problem concerns the importance of smaller species in the diet. While smaller species, such as fish, may be identified at a site, their relative importance in the diet when compared to one identified deer is considerably less (Reitz and Scarry 1985).

NISP is obtained by an actual count of bone or tooth fragments assigned to a particular taxon. Criticisms exist for this measurement of taxonomic abundance in a faunal assemblage as well. First, the measure is affected by butchery and subsequent patterns thereof, and the subjective nature of species identification. Collection and taphonomic agents also affect the validity of the measurement. The greatest criticism deals with element interdependence (Grayson 1979, 1984). How do we know which elements and fragments come from different animals in the assemblage?

Despite the criticisms, MNI and NISP values were calculated for the Florence Stockade faunal materials. However, only NISP measures are used here when considering taxonomic abundance. While it is acknowledged that there is the problem of element interdependence, it is assumed to be less of a problem than site aggregation.

Element presence or absence is a method used to assess butchering practices and consumption patterns. The presence of elements representing the entire carcass leads one to conclude that on-site butchering and consumption was occurring. Additionally, the identification of butchering refuse or offal versus consumption refuse is difficult due to changing cultural ideas as to what is seen as a delicacy, everyday food, or waste. A good example is the consumption of pig's head products or pig's feet. In the mid 19th century, these items were considered delicacies (DeVoe 1867); however, in many 21st century households, these parts are considered waste.

The distribution of elements identified in an assemblage can be divided into categories. The head category includes all material from bones associated with the cranium and

mandible. The rib/vertebrae category includes all vertebrae (atlas, axis, cervical, thoracic, lumbar, and caudal). Forequarters include the scapula, humerus, ulna, and radius. Hindquarters include innominate, sacrum, femur, patella, and tibia. The final category is the feet, which include carpals, tarsals, metacarpals, metatarsals, metapodials, and phalanges.

Other characteristics of the bones were noted as well. Taphonomic alteration of the bone in the form of burning (see Bennett 1999; McCutcheon 1992), butchery marks (chopped, cut, sawn, and hacked) and meat cuts represented (Lyman 1994; Reitz and Wing 1999), and carnivore or rodent gnawing (Morey and Klippel 1991; Thornton and Fee 2001) were also recorded for the assemblage.

Results

The assemblage from 38FL2 is composed of 833 pieces of bone weighing 1580.88 grams (Table 10). Specimens that cross-mend were counted as single specimens. The MNI for the collection is five. Domestic taxa are represented. Bones identifiable to species, genus, family, or order numbered 168 (20.17 percent). Class determinations could be made on 665 (79.83 percent).

The majority of bones identifiable to class were those of mammals ($n = 790$; 89.47 percent). By count, Unidentified Mammal (UID) represents the largest category of bone fragments ($n = 647$) and third in rank for bone weight.

The category Large-Sized Mammal (most likely cow) is second in rank for total weight (wt = 248.12). The majority of these bones are large long bone fragments and rib segments.

Table 10. 38FL2 Species List.

Taxa	Common Name	NISP	% NISP	MNI	% MNI	Wt. (g)
Mammals						
<i>Bos taurus</i>	Domestic Cow	39	4.68	2	40.00	1012.08
<i>Sus scrofa</i>	Domestic Pig	14	1.68	1	20.00	64.04
Large-Sized Mammal		90	10.80	--	--	248.12
Unidentified Mammal		647	77.67	--	--	227.83
	subtotal	790	94.84	3	60.00	1552.07
Birds						
<i>Gallus gallus</i>	Domestic Chicken	25	3.00	2	40.00	23.65
Unidentified Bird		18	2.16	--	--	5.16
	subtotal	43	5.16	2	40.00	28.81
	TOTAL	833	100.00	5	100.00	1580.88

Domestic cow is represented by 39 bone fragments weighing 1,012.08 grams. A minimum of two individuals are represented based on the presence of two right radius distal epiphysis.

Domestic pig bones represent the second domestic mammal taxon in the assemblage. Pig bone fragments ($n = 14$) weigh 64.04 grams. An MNI of one is established based on the presence of one left proximal femur diaphysis.

A total of 43 fragments were identified as bird remains. Most of these ($n = 18$) are long bone diaphysis fragments and are classified as UID bird. UID bird remains weigh 5.16 grams. Domestic chicken (*Gallus gallus*) was identified as well ($n = 25$; wt = 23.65 grams). The presence of two complete right ulnae provides an MNI of two.

Element Distribution

The element distribution for domestic taxa is shown in Table 11. Cow is the most frequently identified taxa to species level. Figure 151 shows the element distribution for cow elements. The majority of the cow bone comes from the meatier ribs, forequarter, and hindquarter regions. Foot elements were also identified in quantities comparable to the meaty portions; indicating that cattle were obtained on the hoof versus as barreled beef.

Table 11. Element Distribution for Domestic Taxa from 38FL2.

Element Grouping	<i>Bos taurus</i> (NISP)	<i>Sus scrofa</i> (NISP)	Chicken (NISP)
Skull	2	1	
Teeth		1	
Ribs/Vertebrae	9	6	
Forequarter	8	1	13
Hindquarter	10	2	12
Feet	10	3	
Total	39	14	25

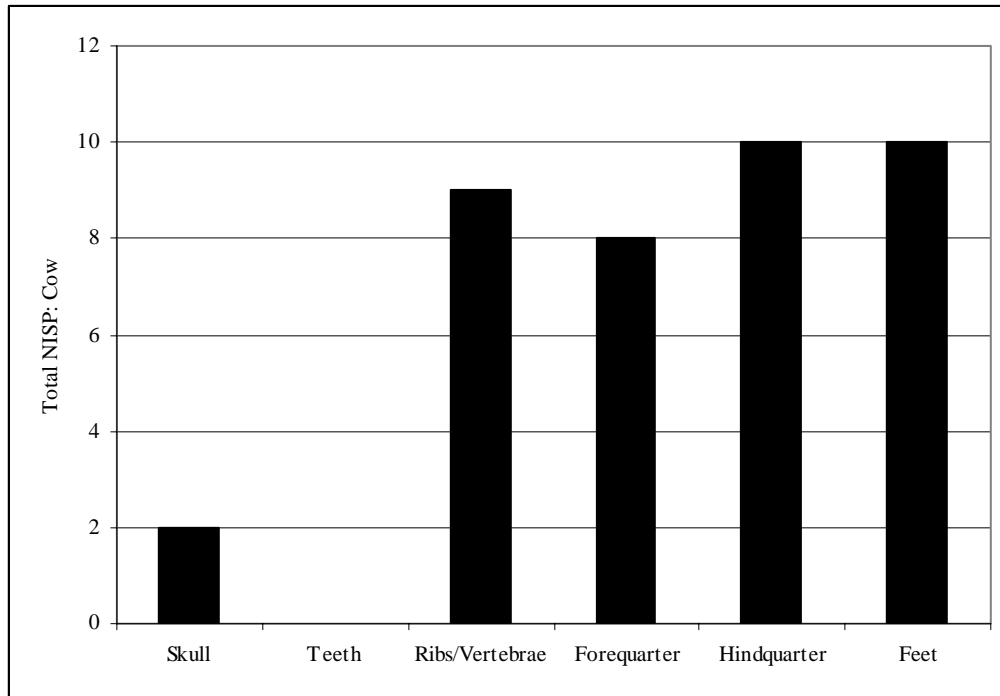


Figure 151. Element Distribution for Cow, 38FL2.

Pig is somewhat less common at 38FL2. All portions of the carcass are represented, again indicating animals butchered on the hoof instead of as preserved provisions. Figure 152 shows the distribution of pig elements.

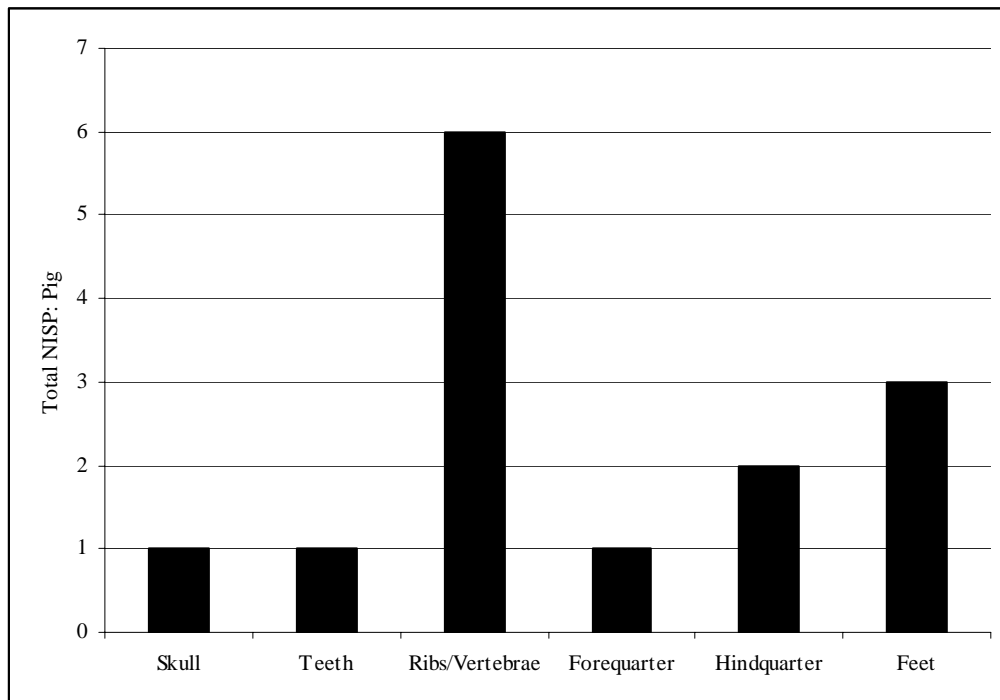


Figure 152. Element Distribution for Pig, 38FL2.

Wing and leg portions were the most frequently identified elements for chicken. Figure 153 shows the element distribution for this taxon. It is likely whole birds were consumed and the absence of cranial, rib, and foot elements is due to poor preservation of these less dense elements.

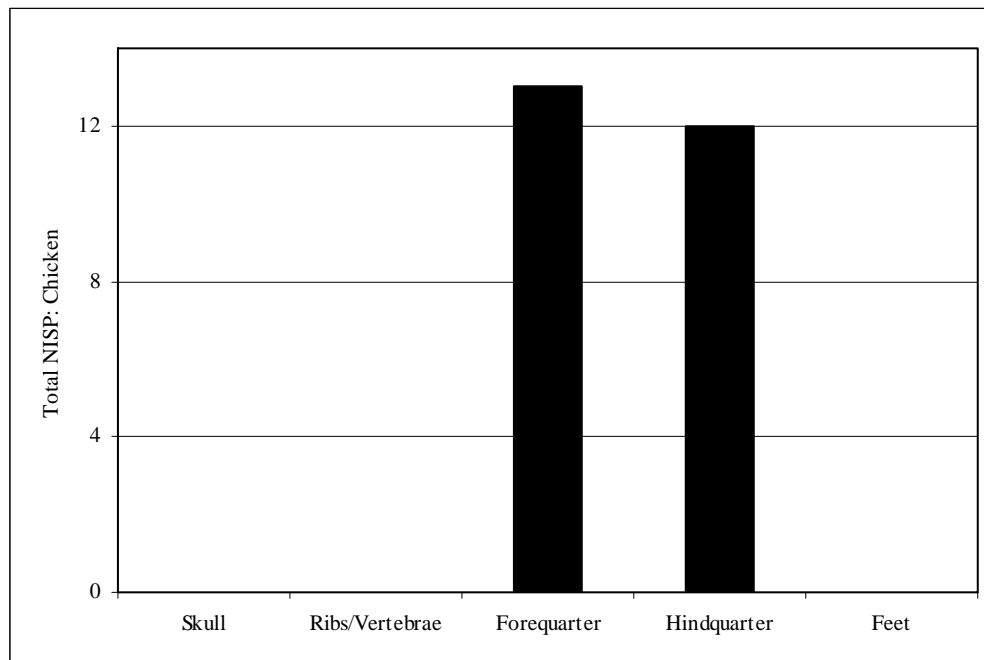


Figure 153. Element Distribution for Chicken, 38FL2.

Bone Modifications

Bone modifications were noted on 402 bones from 38FL2. The most common modification noted was calcined ($n = 401$; wt = 136.71 grams) bone. Burning was noted on one bone fragment (wt = 0.48 grams).

Butchery marks were the other common category of modification noted. Two cow vertebrae showed indications of sawing or chopping. Poor preservation most likely affected the presence of butchery marks, thus making an analysis of meat cuts present ineffective.

Discussion

Faunal remains from 38FL2 indicate that common domestic taxa (cow, pig, and chicken) provided the bulk of the meat diet at the stockade. It is also likely that these animals were obtained locally and butchered on site as all portions of the carcasses are represented in this small sample.

Element distribution for the domestic taxa indicates that a significant amount of initial carcass preparation and butchering was occurring on site. It is likely that carcasses were disposed of at the site as well. This is indicated by the presence of elements from the skeleton with little meat available (skull and feet) and the low percentage of higher meat yielding elements (ribs/vertebrae, fore- and hindquarter). Butchery marks were infrequent, but this is likely due to preservation issues.

The materials from the features analyzed are refuse from meals consumed by the soldiers while occupying the stockade. Further analysis of the sample could give a more complete picture of beef and pork butchering cuts and practices and explore the question of whether salt beef or salt pork was consumed. Additional research into the provisioning practices of the Confederate Army would also provide background for subsistence at this unique site context.

CHAPTER 8. BOTANICAL ANALYSIS

Kandace D. Hollenbach

In June of 2006, MACTEC archaeologists performed Phase III archaeological data recovery excavations at a stockade (38FL2) used by the Confederate Army during the Civil War in Florence, Florence County, South Carolina. The plant remains from fifteen floatation samples representing eight features were analyzed (Appendix E).

Because uncarbonized plant materials are unlikely to be preserved in the moist, acidic soils of the Southeast, even from relatively recent historic contexts (Reitz and Scarry 1985:10; Yarnell 1982), only carbonized plant remains are considered here to be part of the archaeological record. Uncarbonized plant materials are assumed to be modern contaminants that reflect the present-day local habitat, and are therefore not reported.

Methods

The floatation samples were processed by MACTEC using a Flote-tech machine fitted with a 1-mm mesh to capture the heavy fraction. Fabric with 0.285 mm openings was used to catch the light fraction (Paul Avery, personal communication 2007). Both the light and heavy fractions were sent to the Archaeological Research Laboratory at the University of Tennessee-Knoxville for analysis.

The samples were analyzed using standard paleoethnobotanical procedures (Pearsall 2000). Once weighed, the samples were size-graded using nested geologic sieves. The portions greater than 2.00 mm in size were sorted into categories, including bone, shell, lithics, and plant materials. Using a stereoscopic microscope at 10 to 40 power magnification, plant remains were further sorted and identified to the lowest possible taxonomic level. Materials less than 2.00 mm in size were scanned for seeds and plant remains not represented in the larger size fraction. If present, acorn remains were pulled from the 1.40 mm sieve to mitigate biases against their preservation. All materials were then counted (when feasible) and weighed. Identifications were made with reference to Martin and Barkley's (1961) *Seed Identification Manual*, as well as modern comparative specimens.

Results

The fifteen floatation samples yielded 121.21 g of carbonized plant materials, the significant majority of which (107.10 g) is represented by wood (Appendix E). The recovery of non-wood plant remains was relatively low, but included nuts, fruits, crops, and miscellaneous taxa. Nuts included acorns, black walnuts and hickory nuts, all of which would have been available during the fall occupation of the camp. Fruits included grapes, maypop, persimmons and sumac berries. The only vegetables recovered were

one bean and one corn kernel. This may indicate that these foods were scarce for the entire camp, but the sample size precludes this assumption.

Further analysis and discussion of the plant remains have not been requested by MACTEC at this time. Additional analyses would allow a fuller interpretation of use of plants at the Confederate stockade (38FL2).

CHAPTER 9. CONCLUSIONS

The research conducted on the Confederate guard camp at the Florence Stockade provided a rare opportunity to use archaeological techniques in conjunction with intensive historical research to examine the daily lives of Civil War soldiers far removed from the front lines. The information recovered during this project has provided a means for understanding where these troops sheltered themselves, what they did, what they used and what they ate. The following chapter summarizes this data through a discussion of what life was like for the guards and how their lives compared to those of the prisoners housed within the Stockade.

At various times during the occupation of the Florence Stockade, the guard force consisted of members of the 5th Georgia Infantry, 55th Georgia Infantry, the 3rd, 4th, 5th, 6th and 7th Battalions South Carolina Reserve Infantry, the 1st South Carolina Cavalry, the 2nd South Carolina Artillery and the Waccamaw Light Artillery (OR II, VII 1902:972-974). By October 12, the 5th Georgia, a small cavalry detachment and the five reserve battalions were all that remained, providing approximately 1600 men that were fit for duty.

At least 1,200 of the guards were members of the reserve battalions (OR II, VII 1902:972-974). Reserve battalions, also known as “State Troops” or “Senior Reserves” were formed after the passage of a conscription bill by the Confederate government in February 1864. All white males between the ages of 17 and 18 years of age and between the ages of 45 and 50 were to report to their district courthouse for duty. Each group was organized into companies based on their home county and officers were elected (Knudson 2003). These troops received very little training and even less equipment, but were vital in allowing more experienced front-line troops to remain at the front.

The 5th Georgia’s presence at the stockade was short-lived but made a major impact as one their officers, Lieutenant Colonel John F. Iverson, became commandant of the prison. Colonel Iverson and a detachment from his regiment arrived in Florence in early October. He and a few members of his staff remained until the stockade was abandoned even though the 5th Georgia was redeployed in November. The 5th served with the Army of Tennessee through the battles at Murfreesboro, Chickamauga, Chattanooga and Atlanta, suffering a 55 percent casualty rate at Chickamauga. After leaving Florence, the 5th was deployed in the attempt to halt the Union advance through the Carolinas. They surrendered in North Carolina in April 1865 (NPS n.d.).

The 5th was replaced by the 55th Georgia Infantry, which arrived in Florence in late November. They were assigned to East Tennessee until 540 members of the regiment were captured at Cumberland Gap in September 1863. After being exchanged, the 55th was used for guard duty at Andersonville, Georgia and Salisbury, North Carolina as well as Florence. Although elements of the 55th were stationed at Florence at least through January of 1865, very little information is available concerning their time there (NPS n.d.).

Guard duty was tedious at best, and at times, miserable. Not only were guards posted on the parapet above the stockade, but around the outside of the prison and around the camps

as well. This required a large number of men at any given time, with one report indicating that over 300 guards were on duty at any given time.

It is apparent from the daily reports that have survived that the number of men available for guard duty was never adequate. On October 7, 1864, Eccles wrote that “Our men are called on to perform guard duty every other day and night”. His exact meaning is unclear, but it is likely that each soldier would stand guard during one day and then again the next night. This schedule coupled with battalion drills and the day to day work that was required in camp would be demanding under ideal conditions. But with the coming of winter and a serious lack of supplies, conditions were anything but ideal. Major James W. Ward, commander of the 7th Battalion, wrote in his morning report of November 23, 1864 (Florence Military Papers 1864-1865), that:

I notice that many of the poorer class of boys who belong to this command are barefoot and only cotten (sic) clothes and for them to be placed on post for 2 hours such a night as last was, without any chance of fire is at once like destroying their constitution if not life.

Ward again reported on November 28 (Florence Military Papers 1864-1865) that:

I find the police of the various camps not so well regulated as formerly owing I presume to the excessive guard duties for other purposes. (Having to take every available man Police Guard and all for Stockade duty) also the sick and Barefoot at times to prevent the same guard from serving twice in succession.

Further, Captain W. H. Miller of Company A, 5th Battalion, reported on December 10 (Florence Military Papers 1864-1865) that:

I visited the guard twice while on duty and found them vigilant but a great many suffering from the severity of the weather on account of the want of clothing and blankets.

While not on guard duty, the troops were kept busy with various tasks within the camp, such as constructing and maintaining shelter, policing the camp, preparing food and maintaining equipment and clothing. Very few written descriptions of the camp have survived, but two have proven to be very informative. As discussed in Chapter 3, Sidney Andrews (2004) visited the camp in October 1865 only a few months after it was abandoned. He described the camp as consisting of log houses located near the northwest corner of the stockade and another near the northeast corner. The current project area includes the area north of the northwest corner that Andrews described.

Where Andrews provided the location of the camps, Lieutenant Thomas Eccles provided more detail in his letters as to the physical appearance and conditions within the camp. Eccles arrived with the 3rd Battalion on October 3, 1864. The quotes that follow are illustrative of the types of structures used by the guards and clearly demonstrate the

evolution of the camp as the weather changed and their stay lengthened. Eccles' (1864-1865) first mention of the camp came on October 7 when he wrote:

Our men have exercised great ingenuity in construction of tents and huts, which has infringed greatly on their supply of bed clothes, which will inconvenience them greatly when winter sets in. If Gen. Chesnut would furnish the cloth flies (sic) could be made; or plank could be, as a saw-miller nearby offers to furnish it, if a requisition is made.

This passage indicates that no shelter had been prepared for the guards and that they had not been issued tents as they were apparently using blankets for shelter. In his next report, dated October 13, he discusses the possibility that the 3rd might be moved to another location, which he hoped would happen as "Gill's Battalion are without tents". But by his next report on October 28, Eccles opens with, "I seat myself on the pine straw in my tent, to write you a few lines". It appears that conditions were improving, at least for some.

Despite slight improvements, conditions were still uncomfortable for most. On November 4, Eccles (1864-1865) wrote:

We have managed to get two tents to each company in the battalion, one for the officers, and the other a sort of refuge for the sick-but those who have not the industry and skill to construct cabins are still uncomfortably confined to their earthworks, composed of poles crossed transversely over forks, covered with pine brush, and this with dirt-rather a muddy substitute for lime and mortar.

The two tents mentioned by Eccles may have been Sibley tents such as those recorded in the field. This seems likely as he refers to several people being housed in each. By his next report on November 11 (Eccles 1864-1865), the situation seems to have at least become bearable.

The police regulations are ample, and the men have constructed for themselves as comfortable camps as circumstances allow, being without plank or nails. Some, who were able, have brought cloth and made themselves tents, in which they can keep dry.

Eccles (1864-1865) did not mention the condition of the camp again until November 30 when he wrote:

To-day (sic), the sun shines out beautifully, and all hands are building chimneys, as though they expect to stay here for winter quarters. Our chimney is of the latest pattern, the outside being a good imitation of old field-pine, with a chicken coop rampart, wile over the mantel-piece, inside, is a classic mirror, with "devil a face in it".

So after over a month in camp, it appears that adequate shelter was finally being prepared. In his final comment on the living conditions at Florence on January 27, 1865, Eccles (1864-1865) indicates that:

...those who have been anxiously looking for a removal, now express a willingness to remain until the winter is over, as they area generally well provided with comfortable cabins, or tents, with chimnies attached.

Unfortunately, Eccles never indicates where the 3rd Battalion was camped in relation to the stockade or any other landmarks. It is possible based on the features encountered archaeologically that the 3rd was housed partially within the project area. The possible locations of at least three Sibley tents and eight other structures were identified within the Residential Area. Eccles describes several variants of “huts” and “cabins” that could easily match those recorded in the field. He also describes the digging of wells within the camp, which could be the three excavated on the eastern edge of the Residential Area. Admittedly, Eccles’ descriptions do not provide enough locational detail to exclude any other area of the campground, but they do coincide with the archaeological evidence.

While the housing issue seemed to be solved by the end of the guard’s time at Florence, the lack of supplies and adequate equipment would remain a serious issue. By the end of 1864, the Confederate supply system had all but broken down. The Union blockade of southern ports and the lack of manufacturing capability in the South had greatly reduced the amount of military equipment and basic supplies available. If goods were available, it was difficult to transport them as Sherman’s forces advanced. Therefore, the troops at Florence were largely dependent on materials that had been stockpiled by the State of South Carolina that could be transported over rail lines so far untouched by Sherman’s troops. The Muster Roll and Report of Company A of the 3rd Battalion prepared by Captain John Sanders and witnessed by Captain M. W. Coleman of the 4th Battalion (Florence Military Papers 1864-1865) provides a clear summary of the situation with the following remarks:

<i>Discipline:</i>	<i>Good</i>
<i>Instruction:</i>	<i>Fair</i>
<i>Military Appearance:</i>	<i>Ordinary</i>
<i>Arms:</i>	<i>Inferior</i>
<i>Accoutrements:</i>	<i>none received</i>
<i>Clothing:</i>	<i>Private</i>

The struggle to keep the guards supplied is expressed in several period documents discovered during this project and is reflected to some degree in the material recovered archaeologically. The lack of clothing was discussed above as a cause of personal discomfort to soldiers on guard duty. This is further noted in reports from various company officers. On November 5, Captain W. H. Miller of the 5th Battalion requested that, “some step be taken as to the furnishing of shoes and clothes for our men as they (sic) are some who are destitute in that line” (Florence Military Papers 1864-1865).

The supply problem extended to military equipment as well. As Major Warley tried to get the stockade operational, evidence of the coming difficulties was already apparent. An invoice listing the armaments ordered for the stockade on September 19 listed one six pound Napoleon gun with the appropriate accoutrements, 22 six pound spherical case shot, 112 six pound canister rounds, 300 .69 caliber muskets and 12,000 rounds of .69 caliber buck and ball cartridges. These muskets were probably the obsolete Model 1842 musket that was widely issued early in the war, but was largely replaced by 1863. Many state arsenals retained large numbers of them however, and it is likely that South Carolina was no exception. While an acceptable weapon for guard duty and quite deadly when loaded with buck and ball, the use of out-dated weaponry is a minor symptom of the overall supply difficulties.

It should be noted that .54 caliber ammunition, both minie balls and round balls, were recovered as well. As discussed in Chapter 5, these bullets could have been used in either Mississippi or Palmetto rifles or Lorenz rifles. The primary arm carried by the regular army units (5th and 55th Georgia) stationed at Florence is not known, but they could have been using either of the .54 caliber arms. It is more likely that they were issued the Lorenz rifle as they were imported in large numbers by both sides. The Palmetto rifle had been stockpiled by the State of South Carolina and was issued to State troops such as those on duty at Florence.

Although no record of what arms were issued to any given unit was discovered during this project, it is likely that the .69 caliber muskets ordered by Major Warley were issued to the reserve battalions when they arrived at Florence. While it is possible that the Georgia regiments had been issued Lorenz rifles that they carried to the stockade, it is more likely that one or more of the reserve battalions had acquired Palmetto rifles prior to their arrival at Florence. The presence of both calibers, therefore, may provide further evidence that the troops housed within the portion of the camp investigated were members of reserve battalions. Given the concentrations of each caliber in different areas of the camp, it is possible that different reserve battalions were camped near one another or that a regular army unit was camped near a reserve battalion. The latter seems unlikely as historical records indicate that there was a level of animosity between the regulars and reservists.

Other more basic camp equipment was also hard to come by. Axes were apparently in short supply, as on November 23, Major James W. Ward of the 7th Battalion reported that (Florence Military Papers 1864-1865):

I consider the Guard houses very poor Accomodations for want of wood there being no axes to cut or waggons (sic) to haul wood on the eastern side of the Stockade.

In an earlier report (November 5) (Florence Military Papers 1864-1865), Captain W. H. Miller of the 5th Battalion inquired:

If you will be kind enough to furnish a few axes as our men have not enough to furnish themselves with a sufficient quantity of wood.

Shovels were apparently absent all together, at least in portions of the camp. Eccles wrote on October 7 that “our men have commenced digging wells but they have no spades, shovels or picks, so for the present they have stopped...”. Two broken shovel blades were recovered from the camp, one ironically from a well. The other was in very good condition and was obviously hand forged. This would seem to indicate that it was produced by a local blacksmith rather than in a factory. While certainly a clear indication of the problems faced by Confederate forces at the time, especially those on duty in the rear, this hand-made implement also represents a solution, if only temporary.

Much of a soldier’s leisure time in camp was undoubtedly spent on a wide variety of tasks such as mending clothes, writing letters, maintaining his shelter and cooking and eating his meals. Tobacco was commonly used by either chewing or smoking in pipes. Only nine individual pipes were identified from the archaeological research at Florence, but these items were typically carefully curated by the owner and only disposed of if broken. Although against army regulations, the consumption of alcoholic beverages may also have been a common occurrence. Some documentary evidence of this illicit activity was discovered, as Eccles (1864-1865) mentions one sutler smuggling in liquor to the prison and Ripple (Snell 1996) attributes the failure of his escape attempt to his drunken accomplices. The large number of olive glass containers and vessel fragments that were recovered archaeologically further indicate that drinking was a past time enjoyed by at least a few of the soldiers.

While the presence of olive glass vessels originally intended to hold champagne, wine, liquor or beer does not necessarily mean that those products were in use at Florence, their prevalence across the site may indicate that at least some alcohol was available. Bottles were commonly curated and used to hold a wide array of liquids after their original contents were consumed. However, the location of at least three vessels suggests that they were hidden intentionally. Three features, Features 106, 342 and 466, that were originally interpreted as post holes contained nearly complete but broken vessels. In each case, the holes were relatively shallow and just big enough to accommodate the bottle. These features appear to represent small cache pits where bottles, presumably containing an illicit substance, were hidden. These holes may have been dug exclusively for this purpose but it appears that they were expedient hiding places available after the removal of a post or stump. Particularly in Features 342 and 466, the bottle appears to have been whole when it was placed in the hole and broken after deposition. The missing pieces were probably lost to deep plowing.

One of the most important aspects of the current study involves the diet of the soldiers stationed at Florence. Although the analysis of the faunal and botanical remains was limited, important insights were gained on the subsistence base of the troops. The first aspect of the guard’s diet that becomes immediately clear from the archaeological and historical record is that fresh meat, particularly beef, was available. It is known from documentary sources that cows were brought to the camp on the hoof to be slaughtered

and processed. The analysis of the 15 samples submitted indicated that pigs and chickens were available as well. The archaeological evidence supports this as a large amount of bone was recovered from the site. Approximately 40 kilograms (88 pounds) of faunal remains were recovered from every type of feature and all areas of the site. Much of this material was fragmentary, but larger elements were derived from large mammals, most likely cow.

The primary complaint from Confederate troops at Florence concerning their rations (at least that were recorded), concerned a lack of vegetables. Writing about the rations issued to the prisoners, Eccles stated that, "they crave vegetables which except potatoes, are not to be had by any of us" (November 4, 1864). It seems logical that vegetables would have been in short supply as it was past the prime growing season when the camp was occupied and few men were available to prepare fields or plant and harvest crops. In fact, Eccles refers several times to men requesting leave to go home and harvest their corn or plant their wheat so that their family would be provided for.

Plant remains recovered from 15 proveniences were analyzed as reported in Chapter 8. The results of the examination of this small sample can not be extrapolated to the entire population of the camp, but they did provide some insight as to what plant foods might have been available. Although wood fragments made up the vast majority of the material recovered, nuts, fruits and vegetables were also represented. Nuts included acorns, black walnuts and hickory nuts, all of which would have been available during the fall occupation of the camp. Fruits included grapes, maypop, persimmons and sumac berries. The only vegetables recovered were one bean and one corn kernel. This may indicate that these foods were scarce for the entire camp, but soil conditions that are not conducive to the preservation of vegetable matter and the sample size precludes this assumption.

The importance of the assemblage of food remains can not be overstated. The subsequent analysis of the remainder the botanical and faunal remains has enormous research potential. The data generated by this work should answer many questions concerning the subsistence of rear-echelon Confederate soldiers during the late war period.

The documentary information collected on the prison combined with that gathered on the guard camp and the archaeological evidence has provided a unique opportunity to compare the daily life of a prisoner of war with that of his captors. There is far more contrast than commonality between the two groups. It should be stated here that all of the evidence on conditions in the prison is derived from the historical record. No archaeology has taken place within the stockade that might verify what has been written about it. The excavations conducted within the Confederate camp provide a perspective on the historical record not available within the stockade.

As discussed above, the guards were provided with limited shelter early in their assignment to Florence, but the situation improved greatly by the time winter weather became a problem. The delivery of tents and the construction of log huts and cabins

made the camp comfortable enough that the reserves were willing to spend the winter there. For the prisoners, no shelter was ever provided, save for what they were able to carry in with them. The lucky prisoners were able to dig a hole large enough to live in that they covered with limbs and pine boughs. Some built lean-tos while many who were unable to exert themselves simply lay on the open ground. As winter arrived in Florence, a captive already weak from hunger and disease had little hope of survival without some form of shelter. The quality of housing contrasts sharply despite the claims of Major John Gould (1865:895), stationed in the Florence-area as part of the Union occupation forces, that “U.S. troops quartered in Florence Prison during the winter would fare nearly as well as those in the guard houses outside”.

The same applies to the basic supplies needed by a soldier in the field. Although one report from W. H. Miller of the 5th Battalion stated that, “the troops (of the 5th Battalion) are in great want of cooking utensils,” this deficiency was not mentioned in any other accounts used in this study. The recovery of several kitchenware items, such as dutch oven or kettle lids, forks, spoons and even a folding corkscrew indicate that the means for preparing and cooking food was available, at least to the troops in the area investigated. The prisoners, however, who were issued only uncooked rations, were provided with no cooking utensils at all. They organized themselves into small groups of four to five in order to pool their resources. Hopefully, each member of the group would provide an item that the rest lacked. Tin cups and boilers were highly treasured items as were pocket knives. Ripple (Snell 1996) related the sad tale of a fellow prisoner who was willing to trade a testament given to him by his young daughter as he left for the war for a pocket knife. He was willing to give up what was certainly his most treasured possession at that point in order to survive. Fortunately, Ripple’s group had two knives so one was given to their comrade. Canteens were considered to be indispensable, but not for their intended purpose. If the canteen was broken in half at the edge seams, the pieces could be used for cooking, eating or even digging. Although the Confederate supply system was inadequate to provide everything needed in camp, they at least had alternatives in local craftsmen or merchants.

The most marked difference in the daily lives of the guards and prisoners was in the quantity and quality of food available. Confederate accounts indicate that the prisoners at Florence were receiving the same rations as those provided to the guards. Eccles (1864-1865) referred to this at least twice. In his first report from Florence on October 7, 1864, in referring to the prisoners he wrote, “they cook their own rations, which of course they complain of, however plentiful they may be”. On November 4, Eccles (1864-1865) claimed that:

They are well fed, drawing the same rations we do, but they crave vegetables, which except for potatoes, are not to be had by any of us. They have boothses (sic) inside, where they sell bacon, tobacco, potatoes, red peppers, and pea soup, to one another...”.

Based on historical and archaeological evidence, the idea that the guards and prisoners were receiving the same rations is obviously false. In fact, one of the most significant

accomplishments of this project was to dispel this myth. The historical record indicates that the Confederate guards had sufficient, if not highly varied, supplies of food. A report on the Cheraw and Darlington Railroad (Florence Military Papers 1864-1865) states that 170 bags (18,020 pounds) of corn meal were delivered on January 13, 1865. Whether any of this was shared with the prisoners is unclear, but it proves that the railroads were still capable of moving supplies through the interior of South Carolina. It is also interesting to note that none of the daily reports available make any mention of a shortage of food for the guards. Eccles considered his rations short because there was no tobacco, not indicative of a man who is starving.

The archaeological record indicates that fresh beef was available to the men and that cattle were brought to the site for slaughter. The large amount of animal bone recovered from the camp would seem to indicate that it was served often and to everyone. The analysis of the faunal remains conducted so far also identified pig and chicken which indicates that there was some variety to the guard's rations. It is unclear at this point what wild game, if any, might also have supplemented the diet.

While no archaeological data exist from the interior of the stockade, it is clear from the historical record that the prisoners were issued barely enough food to survive. Daily rations consisted primarily of beans, corn meal and occasionally flour. Fresh beef was issued to the general prison population only twice in the entire six month period that the stockade was occupied. Sweet potatoes were provided occasionally, but no other vegetables were available.

Based on this information, it is clear that major differences in the quality of life between the guards and prisoners existed and that the idea that the guards were eating the same foods as the prisoners is patently false. These differences were manifested primarily in the overall health of each group. Eccles (1864-1865) refers to an outbreak of mumps and measles that sent several members of 3rd Battalion to the hospital in Florence, which he described as, "a comfortable building". Typhoid was apparently another issue as three members of the 3rd Battalion died from this disease. Eccles mentions four other deaths, but did not relate the cause. In all, Eccles reported the deaths of seven members of the 3rd Battalion. If it is assumed that the other battalions experienced a similar death rate, then approximately 35 members of the reserves died while at Florence. This number is purely extrapolation as no official number of deaths among the reserves has been located.

The health of the guards stands in stark contrast to that of the prisoners. Weakened by malnutrition, the prisoners were highly susceptible to disease and succumbed easily. Many simply starved to death while others were afflicted by any number of diseases. Scurvy, a direct result of insufficient vitamin C or ascorbic acid in the diet from a lack of fresh fruits and vegetables, was a major problem as were typhoid and pneumonia caused by exposure to the elements. The poor water supply often caused dysentery, which was often fatal in already weak individuals. The sick prisoners were sent to the prison hospital, which consisted of log sheds, while small pox patients were housed in a separate structure outside the stockade. The number of patients far exceeded the capabilities of the small medical staff and medicine was scarce. The combination of exposure to the elements, malnutrition and

disease was more than many of the prisoners could bear. As a result of these conditions, as many as 2,800 of them died in the six months that the stockade was in use.

The remains of one individual were recovered from what appeared to be a house (Feature 95) within the camp ground. How this person came to be buried in this location was not known, but it was hoped that analysis of the skeletal remains might provide some insight on who he was, where he came from and how he came to be there. Skeletal analysis indicated that this individual was a male, aged 20 to 35 years at the time of death and exhibited traits that were within the range of both white and black ancestry. The absence of the skull made more precise estimates of ancestry difficult. He was between 5 feet 8 inches and 6 feet 2 inches in height and exhibited no obvious pathologies, although the poor preservation of the bone limited this analysis.

Isotopic analysis of the remains indicated that the individual's diet consisted primarily of corn products and corn-fed meats, although marine foods were also consumed. This places his place of residence for the last 10 to 15 years of his life somewhere on or near the Gulf or Atlantic coast. The only South Carolina counties located within the area of possible origin indicated by the isotopic analysis are Beaufort, Colleton and Charleston counties. No known residents of these counties served with the reserves at Florence. Men from Horry and Georgetown Counties, both on the South Carolina coast but north of the area of possible origin, were members of the 7th Battalion of South Carolina Reserves, which was stationed at Florence.

The questions remain as to who this person was and how he came to be buried in a structure. DNA analysis planned for the future will hopefully provide more information. Until then, there are dozens of possibilities, and none without problems. The fact that he was intentionally buried, although not formally, and that he was apparently wearing a full suit of clothes, including a jacket, indicates that he was probably not a prisoner. No military buttons were recovered from the burial although several civilian types were located. The presence of the components of a buck and ball cartridge, however, suggests that he was a soldier. This may indicate that he was a reservist, as it appears that no actual uniforms were issued to them. Another less likely possibility is that the buck and ball load indicates that he was shot and died as a result. No trauma or lead splatter was noted on the remains to verify this, so it is more likely that the ammunition was either tossed in with the burial fill or was on his person when buried. Another scenario could be that he was a freed slave, possibly of mixed race, with nowhere else to go, that took refuge in the hut after the camp was abandoned and died there.

Obviously, these questions can not be answered unless further evidence is revealed in the future. It is a sad truth that his identity and the circumstances surrounding his death may never be known. At this point in time, it is being assumed that he was a soldier of unknown allegiance. As such, his remains are scheduled to be reinterred in a plot within the old section of the Florence National Cemetery.

Closing

The historical and archaeological research at 38FL2 represents the first time that a Confederate camp ground has been excavated in the state of South Carolina. It is also one of very few professional excavations that have focused on the guards outside a prisoner of war facility and not the structure of the facility itself or the prisoners inside. These rear echelon troops, made up of young boys, old men and veteran soldiers removed from the front lines made up a vital resource for the Confederate Army that has been the focus of little study. Although other prison sites and the surrounding support areas remain, Florence provided a unique opportunity to study the day-to-day existence of the guards during a very short period of time in archaeological terms. The complexity of the features encountered and of the landscape that they represent is a testament to how difficult it can be to interpret this type of site, especially one that was inhabited for longer than six months. It is hoped that the information related in this report can serve as a block in the foundation of our knowledge that will support future projects on important sites such as this.

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APPENDIX A
FEATURE LIST

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
1	Not Relocated			
2	Unexcavated	75	38	
3	Not Relocated			
4	Slit Trench	350	137	35
5	Unexcavated	81	78	
6	Not Relocated			
7	Not Relocated			
8	Not Relocated			
9	Not Relocated			
10	Not Relocated			
11	Not Relocated			
12	Not Relocated			
13	Not Relocated			
14	Not Relocated			
15	Not Relocated			
16	Not Relocated			
17	Not Relocated			
18	Unexcavated	50	47	
19	Not Relocated			
20	Tree	80	68	51
21	Not Relocated			
22	Not Relocated			
23	Not Relocated			
24	Not Relocated			
25	Not Relocated			
26	Not Relocated			
27	Not Relocated			
28	Not Relocated			
29	Not Relocated			
30	Not Relocated			
31	Not Relocated			
32	Not Relocated			
33	Not Relocated			
34	Not Relocated			
35	Not Relocated			
36	Unexcavated	34	33	
37	Not Relocated			
38	Not Relocated			
39	Not Relocated			
40	Not Relocated			
41	Not Relocated			
42	Not Relocated			

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
43	Unexcavated	55	42	
44	Unexcavated	53	51	
45	Unexcavated	21	16	
46	Not Relocated			
47	Not Relocated			
48	Not Relocated			
49	Not Relocated			
50	Not Relocated			
51	Not Relocated			
52	Not Relocated			
53	Not Relocated			
54	Not Relocated			
55	Not Relocated			
56	Not Relocated			
57	Not Relocated			
58	Not Relocated			
59	Not Relocated			
60	Not Relocated			
61	Not Relocated			
62	Tree	98	63	49
63	Unexcavated	39	39	
64	Not Relocated			
65	Not Relocated			
66	Not Relocated			
67	Pit	121	40	15
67A	Pit	40	34	11
68	Unexcavated	47	47	
69	Unexcavated	47	47	
70	Pit	304	73	80
71	Not Relocated			
72	Unexcavated	20	20	
73	Unexcavated	174	103	
74	Not Relocated			
75	Not Relocated			
76	Not Relocated			
77	Unexcavated	20	20	
78	Unexcavated	15	15	
79B	Unexcavated	40	35	
79C	Unexcavated	29	27	
80	Unexcavated	69	67	
81	Not Relocated			
82	Not Relocated			

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
83	Pit	80	70	14
84	Slit Trench	210	30	14
85	House	300	183	19
85A	Unexcavated	17	17	
86	Pit	70	67	13
87	Not Relocated			
88	Post	50	35	12
89	Pit	135	45	35
90	Unexcavated	74	59	
91	Unexcavated	57	38	
92	Unexcavated	40	20	
93	House	327	215	19
94	Unexcavated	84	64	
95	House	247	247	15
95A	Pit	91	86	12
96	Unexcavated	146	86	
97	Pit	38	38	11
98	Slit Trench	193	80	25
99	Unexcavated	40	35	
100	Slit Trench	240	70	33
101	Not Relocated			
102	Unexcavated	68	48	
103	Unexcavated	111	78	
104	Unexcavated	89	64	
105	Unexcavated	82	69	
106	Post	28	22	11
107	Pit	63	52	27
108	Unexcavated	81	53	
109	Pit	470	115	28
110	Unexcavated	49	29	
111	Unexcavated	42	41	
112	Unexcavated	38	28	
113	Unexcavated	21	20	
114	Unexcavated	61	29	
115	Unexcavated	45	42	
116	Unexcavated	61	44	
117	Unexcavated	27	8	
118	Unexcavated	15	14	
119	Not Relocated			
120	Not Relocated			
121	Not Relocated			
122	Unexcavated	87	79	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
123	Not Relocated			
124	Not Relocated			
125	Not Relocated			
126	Unexcavated	53	51	
127	Not Relocated			
128	Not Relocated			
129	Not Relocated			
130	Not Relocated			
131	Not Relocated			
132	Not Relocated			
133	Not Relocated			
134	Not Relocated			
135	Not Relocated			
136	Not Relocated			
137	Not Relocated			
138	Not Relocated			
139	Unexcavated	24	18	
140	Unexcavated	100	59	
141	Not Relocated			
142	Not Relocated			
143	Unexcavated	20	20	
144	Unexcavated	42	39	
145	Not Relocated			
146	Not Relocated			
147	Unexcavated	30	20	
148	Not Relocated			
149	Not Relocated			
150	Not Relocated			
151	Pit	240	90	85
152	Pit	64	40	31
153	Post	35	30	20
154	Not Relocated			
200*	Post	33	33	38
201	Post	25	23	8
202	Unexcavated	69	68	
203	Tree	167	94	21
204	Tree	83	73	26
205	Unexcavated	111	102	
206	Disturbance	20	18	37
207	Pit	146	55	35
208	Disturbance	26	19	8
209	Unexcavated	66	63	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
210	Pit	150	125	30
211	Post	38	30	21
212	House	254	227	25
213	Post	35	35	13
214	# Not Used			
215	Pit	212	190	34
216	House	296	245	17
217	Pit	220	100	80
218	Disturbance	112	85	20
219	Pit	70	60	40
220	Unexcavated	53	31	
221	House	335	217	20
222	Unexcavated	66	31	
223	House	347	306	50
224	Unexcavated	265	118	
225	Pit	133	62	13
225A	Disturbance	95	55	
226	Unexcavated	15	15	
227	Unexcavated	69	56	
228	Unexcavated	44	37	
229	Unexcavated	48	31	
230	Unexcavated	20	20	
231	Unexcavated	30	30	
232	Unexcavated	20	20	
233	Unexcavated	89	56	
234	Unexcavated	26	24	
235	Tree	139	105	
236	Pit	168	117	38
237	Unexcavated	74	49	
238	Unexcavated	40	35	
239	Slit Trench	165	60	31
239A	Pit	121	55	
240	Unexcavated	129	88	
241	Unexcavated	141	120	
242	Slit Trench	182	115	41
243	Unexcavated	20	20	
244	Unexcavated	72	71	
245	Unexcavated	192	57	
246	Trench	400	30	20
247	Pit	122	110	31
248	Slit Trench	250	50	25
249	Unexcavated	94	91	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
250	Unexcavated	15	15	
251	Unexcavated	67	35	
252	Unexcavated	56	28	
253	Unexcavated			
254	Unexcavated	174	75	
255	Unexcavated	159	68	
256	Unexcavated	30	30	
257	Unexcavated	40	30	
258	Unexcavated	69	60	
259	Tree	275	80	27
259A	Unexcavated	213	67	
260	Post	34	34	26
261	Privy	92	49	66
262	Unexcavated	45	40	
263	Unexcavated	75	43	
264	Unexcavated	53	45	
265	Unexcavated	104	101	
266	Tree	30	26	40
267	Tree	40	28	16
268	Tree	187	77	23
269	Unexcavated	97	51	
270	Unexcavated	77	46	
271	Unexcavated	26	20	
272	Slit Trench	144	79	31
272A	Post	35	33	17
272B	Post	35	26	14
273	Unexcavated	83	35	
274	Unexcavated	20	20	
275	Unexcavated	20	20	
276	Unexcavated	146	134	
277	Unexcavated	57	53	
278	Slit Trench	270	103	22
279	Incl. w/278			
280A	Unexcavated	871	22	
280B	Unexcavated	165	15	
280C	Unexcavated	347	25	
280D	Unexcavated	167	15	
280E	Unexcavated	173	15	
281	Unexcavated	49	38	
282	Unexcavated	64	56	
283	Unexcavated	91	60	
284	Unexcavated	91	62	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
285	Unexcavated	15	15	
286	Pit	284	45	30
287	Unexcavated	20	20	
288	Unexcavated	45	34	
289	Unexcavated	59	23	
290	Unexcavated	64	51	
291	Unexcavated	47	43	
292	Unexcavated	20	20	
293	Unexcavated	15	15	
294	Tree	30	20	12
295	Pit	154	67	21
296	Unexcavated	55	55	
297	Disturbance	75	67	14
298	Unexcavated	25	25	
299	Unexcavated	89	56	
300	Unexcavated	303	242	
301	Unexcavated	64	58	
302	Tree	31	30	70
303	Unexcavated	51	34	
304A	Pit	37	32	18
304B	Pit	59	45	22
305	Pit	135	120	38
306	Unexcavated	15	15	
307	Post	25	23	55
308	Unexcavated	36	32	
309	Post	40	35	62
310	Tree	43	42	39
311	Unexcavated	15	15	
312	Unexcavated	15	15	
313	Tree	246	88	43
314	Unexcavated	21	18	
315	Unexcavated	47	40	
316	Unexcavated	58	39	
317	Unexcavated	34	25	
319	Unexcavated	58	57	
320	Tree	60	55	90
321	Unexcavated	28	14	
322	Unexcavated	19	15	
323	Unexcavated	30	29	
324	Unexcavated	29	27	
325	Pit	70	70	45
326	Unexcavated	22	16	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
327	Unexcavated	24	20	
328	Unexcavated	81	73	
329	Unexcavated	26	25	
330	Unexcavated	32	29	
331	Unexcavated	29	26	
332	Unexcavated	60	27	
333	Unexcavated	33	30	
334	Unexcavated	22	20	
335	Unexcavated	27	25	
336	Unexcavated	85	28	
337	Unexcavated	29	20	
338	Pit	220	96	19
339	Disturbance	110	60	10
340	Unexcavated	61	57	
341	Unexcavated			
342	Post	35	35	19
343	Pit	168	90	33
344	Unexcavated	86	35	
345	Unexcavated	40	30	
346	Pit	400	165	70
347	Unexcavated	15	15	
348	Pit	380	140	33
348B	Tree	90	55	29
348-P2	Disturbance	20	16	
349	Post	20	15	4
350	Post	31	15	10
351	Post	30	25	10
352	Pit	195	191	25
353	Tree	26	23	14
354	Post	25	20	5
355	Slit Trench	97	50	26
356	Slit Trench	223	95	28
356A	Disturbance	80	43	
357	Unexcavated	78	64	
358	Unexcavated	54	51	
359	Post	20	19	5
360	Pit	98	36	17
361	Slit Trench	278	114	31
362	Unexcavated	20	20	
363	Unexcavated	15	15	
364	Tree	34	33	57
365	Unexcavated	15	15	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
366	Unexcavated	15	15	
367	Unexcavated	81	71	
368	Unexcavated	151	61	
369	Unexcavated	149	110	
370	Unexcavated	75	40	
371	Pit	100	85	30
371A	Disturbance	114	97	24
372A	Disturbance	510	80	10
372B	Disturbance	365	55	10
372C	Slit Trench	280	150	35
372D	Trench	288	75	20
372E	Disturbance	165	61	9
373	Pit	185	185	54
374	Unexcavated	37	34	
375	Disturbance	312	130	
376	Pit	171	160	29
377	Pit	121	111	30
378	Pit	70	40	21
379	Pit	235	195	16
380	Pit	186	100	25
380A	Disturbance	70	32	8
380B	Pit	40	40	12
380C	Post	50	50	14
381	Unexcavated	25	22	
382	Tree	33	30	60
383	Unexcavated	76	24	
384	Unexcavated	30	24	
385	Unexcavated	17	11	
386	Unexcavated	30	18	
387	Unexcavated	22	22	
388	Unexcavated	56	53	
389	Unexcavated	32	29	
390	Unexcavated	40	38	
391	Disturbance	162	66	26
392	Unexcavated	19	15	
393	Unexcavated	35	34	
394	Unexcavated	43	26	
395	Unexcavated	85	40	
396	Unexcavated	45	43	
397	Unexcavated	29	28	
398	Pit	168	125	24
399	Post	20	18	14

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
400	Tree	184	103	34
401	Unexcavated	15	15	
402	Unexcavated	28	26	
403	Unexcavated	21	15	
404	Unexcavated	18	13	
405	Unexcavated	27	22	
406	Unexcavated	55	31	
407	Unexcavated	37	32	
408	Unexcavated	62	35	
409	Unexcavated	67	54	
410	Unexcavated	66	38	
411	Unexcavated	26	16	
412	Unexcavated	50	32	
413	Unexcavated	63	56	
414	Unexcavated	223	15	
415	Unexcavated	16	12	
416	Unexcavated	316	19	
417	Unexcavated	77	34	
418	Unexcavated	21	16	
419	Unexcavated			
420	Tree	412	210	30
421	Disturbance	213	65	9
422	Unexcavated	28	23	
423	Unexcavated	28	19	
424	Unexcavated	18	18	
425	Pit	280	155	101
426	Unexcavated	38	34	
427	Unexcavated	85	80	
428	Unexcavated	51	31	
429	Unexcavated	33	31	
430	Unexcavated	22	18	
431	Unexcavated	43	27	
432	Tree	278	194	20
433	Unexcavated	28	20	
434	Disturbance	210	90	22
435	Tree	169	156	20
436	Unexcavated	72	53	
437	Unexcavated	71	34	
438	Unexcavated	76	55	
439	Unexcavated	56	50	
440	Unexcavated	212	132	
441	Unexcavated	26	15	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
442	Unexcavated	47	41	
443	Prehistoric Pit	240	135	27
444	Unexcavated	41	22	
445	Unexcavated	158	58	
446	Tree	146	87	16
447	Prehistoric Pit	125	75	18
448	Unexcavated	30	28	
449	Trench	300	184	22
449A	Post	50	46	9
450	Pit	160	75	15
451	Prehistoric Pit	155	149	34
452	Post	30	30	15
453	Tree	45	45	20
454	Unexcavated	242	98	
455	Pit	188	78	37
456	Unexcavated	22	19	
457	Unexcavated	33	28	
458	Tree	395	142	30
458A	Tree	86	70	11
459	Pit	211	55	29
460	Unexcavated	31	29	
461	Unexcavated	27	23	
462	Tree	44	36	10
463	Unexcavated	54	30	
464	Tree	88	57	24
465	Unexcavated	90	80	
466	Post	49	41	15
467	Unexcavated	91	54	
468	Tree	95	65	19
469	Pit	74	65	24
470	Unexcavated	26	26	
471	Prehistoric Pit	162	128	12
472	Tree	46	36	45
473	Tree	135	38	13
474	Unexcavated	22	20	
475	Tree	98	89	30
476	Unexcavated	33	20	
477	Unexcavated	27	20	
478	Unexcavated	46	30	
479	Pit	233	160	41
480	Unexcavated	61	46	
481	Tree	152	118	24

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
482	Unexcavated	20	17	
483	Unexcavated	35	23	
484	Pit	220	100	55
485	Trench	120	750	31
486	Trench	619	203	25
487	Tree	240	65	20
488	Unexcavated	144	54	
489	Unexcavated	82	69	
490	Tree	98	53	56
491	Unexcavated	169	96	
492	Unexcavated	96	47	
493	Well	299	265	663
494	Unexcavated	916	63	
495	Pit	125	113	34
496	Unexcavated	32	32	
497	Unexcavated	116	49	
498	Unexcavated	59	56	
499	Unexcavated	26	25	
500	Unexcavated	63	50	
501	Unexcavated	40	32	
502	Well	390	320	588
503	Unexcavated	85	72	
504	Unexcavated	17	14	
505	Unexcavated	18	16	
506	Unexcavated	23	20	
507	Pit	154	121	26
508	Unexcavated	62	33	
509	Unexcavated	25	20	
510	Unexcavated	38	35	
511	Unexcavated	33	29	
512	Unexcavated	22	14	
513-P1	Unexcavated	45	28	
513-P2	Unexcavated	41	24	
513-P3	Post	25	25	38
513-P4	Unexcavated	44	39	
513-P5	Post	16	15	26
513-P6	Unexcavated	52	36	
513-P7	Tree	14	14	50
513-P8	Tree	14	13	40
514	Pit	157	132	60
515	Unexcavated	25	23	
516	Unexcavated	29	24	

Appendix A: Feature List

Feature #	Feature Type	Major axis(cm)	Minor axis(cm)	Depth(cmbd)
517	Post	20	20	15
518	Well	282	215	630
520	Unexcavated	31	29	
521	Unexcavated	43	40	
522	Unexcavated	50	47	
523	Unexcavated	116	63	
524	Unexcavated	89	68	
525	Tree	323	158	63
526	Unexcavated	127	48	
527	Pit	432	146	18
528	Unexcavated	25	15	
529	Not Relocated			
530	Unexcavated	89	48	
531	Unexcavated	47	40	
532	Privy	225	180	104
533	Unexcavated	60	45	
534	Tree	140	105	50
535	Privy	137	95	68
536	Unexcavated	44	40	
537	Unexcavated	39	32	
538	Post	35	30	5
539	Pit	109	103	35
540	House	432	314	70
541	Unexcavated	70	60	
542	Unexcavated	34	29	
543	Post	37	33	12
544	Unexcavated	16	13	
545	Unexcavated	18	15	
546	Unexcavated	23	23	
547	Disturbance	315	171	21
548	Unexcavated	182	45	
549	Unexcavated	40	31	
550	Post	40	30	27
551	Post	31	26	23
552	Pit	363	120	50
553	Pit	250	130	90
554	Unexcavated	19	15	
555	Unexcavated	267	85	

* Features 1-154 were recorded by TRC, but only 149 were considered to be cultural (Grunden and Holland 2005). Features recorded by MACTEC begin with Feature 200.

cm = centimeters

cmbd = centimeters below datum

APPENDIX B
RECOVERED MATERIALS INVENTORY

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
4	E 1/2	750	1	Clothing	Button	2 piece brass Eagle	14.6 mm	ca. 1860	
4	E 1/2	750	9	Kitchen	Container Glass	light aqua bottle fragment			
4	E 1/2	750	1	Kitchen	Container Glass	light aqua bottle fragment			
4	E 1/2	750	1	Kitchen	Container Glass	olive bottle fragment		1730-1870	
4	E 1/2	750	7	Kitchen	Container Glass	olive bottle fragment		1730-1870	
4	W 1/2	751	3	Kitchen	Container Glass	colorless indeterminate fragment			
4	Dark Fill	752	3	Activities	Other	ferrous fragments			very small fragments
67	S 1/2	267	1	Activities	Other	coal			
67	S 1/2	267	1	Architectural	Other	asbestos tile			intrusive
67	S 1/2	267	3	Architectural	Nail	cut		1815-1900	
70	N 1/2	263	1	Architectural	Nail	cut		1815-1900	
70	N 1/2	263	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
70	N 1/2	263	1	Kitchen	Container Glass	dark olive bottle fragment			
70	S 1/2-HEAVY FRACTION	264	3	Arms	Ammunition	percussion cap			
70	S 1/2	264	1	Kitchen	Container Glass	colorless indeterminate fragment			
70	S 1/2	277	6	Architectural	Nail	cut		1815-1900	
70	S 1/2	277	2	Architectural	Nail	proximal, cut		1835-1900	
70	S 1/2	277	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
70	S 1/2	277	1	Kitchen	Container Glass	dark aqua indeterminate fragment			
70	S 1/2	277	1	Kitchen	Container Glass	dark blue/green indeterminate fragment			
70	S 1/2	277	2	Kitchen	Container Glass	olive bottle fragment			
70	E/W trench	285	1	Kitchen	Container Glass	colorless indeterminate fragment			
70	E/W Trench	287	1	Architectural	Nail	whole, unaltered, wire	60 p	1900-	
70	E/W Trench	289	2	Architectural	Nail	medial, cut		1815-1900	
70	E/W Trench	289	1	Architectural	Nail	proximal, cut		1835-1900	
84	W 1/2	247	3	Activities	Other	ferrous fragments			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
85	NW 1/4	212	28	Activities	Sheet Tin/Tinned Iron	tin fragments			
85	NW 1/4	212	3	Architectural	Nail	medial, cut		1815-1900	
85	NW 1/4	212	9	Architectural	Nail	proximal, cut		1835-1900	
85	NW 1/4	212	1	Architectural	Nail	distal, pulled, cut		1815-1900	
85	NW 1/4	212	1	Architectural	Nail	medial, pulled, cut		1815-1900	
85	NW 1/4	212	1	Arms	Ammunition	percussion cap			
85	NW 1/4	212	2	Arms	Ammunition	percussion cap			
85	NW 1/4	212	1	Arms	Ammunition	.64 cal round ball	0.6425		
85	NW 1/4	212	1	Arms	Ammunition	.64 cal round ball	0.653		
85	NW 1/4	212	1	Arms	Ammunition	.64 cal round ball	0.6495		
85	NW 1/4	212	1	Clothing	Button	badly corroded	15.16 mm		
85	NW 1/4	212	1	Clothing	Button	hole porcelain	15.84 mm	1840-	
85	NW 1/4	212	1	Clothing	Button	hole porcelain	17.6 mm	1840-	
85	NW 1/4	212	1	Personal	Currency	brass sutler's token			
85	NW 1/4	213	13	Activities	Sheet Tin/Tinned Iron	tin fragments			
85	NW 1/4	214	11	Activities	Other	ferrous fragments			very small fragments
85	SW 1/4	218	1	Architectural	Brick	handmade	471.8 g		
85	SW 1/4	218	4	Architectural	Nail	proximal, cut		1835-1900	
85	SW 1/4	218	1	Arms	Ammunition	.577/.58 cal Minie ball			
85	SW 1/4	219	1	Architectural	Nail	proximal, cut		1835-1900	
85	SW 1/4	219	1	Architectural	Nail	medial, cut		1815-1900	
85	NE 1/4	229	3	Activities	Other	ferrous metal fragment			
85	NE 1/4	229	2	Architectural	Nail	proximal, cut		1835-1900	
85	NE 1/4	229	9	Architectural	Nail	cut		1815-1900	
85	SE 1/4	234	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
85	SE 1/4	234	1	Architectural	Nail	proximal, cut		1835-1900	
85	SE 1/4	235	1	Architectural	Nail	medial, cut		1815-1900	
85	SE 1/4	241	2	Architectural	Nail	proximal, cut		1835-1900	
85	SE 1/4	241	1	Architectural	Nail	distal, cut		1815-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
85	SE 1/4 HEARTH- HEAVY FRACTION	241	1	Arms	Other	lead			
85	SE 1/4 HEARTH- HEAVY FRACTION	241	1	Arms	Ammunition	percussion cap			
85	SE 1/4 Hearth	241	1	Clothing	Button	heavily corroded	17.5 mm		
85	SE 1/4 Hearth, Ash Layer	242	1	Activities	Other	ferrous fragments			very small fragments
85	SE 1/4	242	2	Architectural	Nail	proximal, cut		1835-1900	
85	SE 1/4	242	2	Architectural	Nail	distal, cut		1815-1900	
85	SE 1/4 HEARTH-ASH LAYER- HEAVY FRACTION	242	4	Arms	Other	lead			
85	SE 1/4 Hearth	242	1	Clothing	Other Fasteners	copper eyelet			
85	SE 1/4 Hearth, Ash and Charcoal Layer	243	12	Activities	Sheet Tin/Tinned Iron	tin fragments			
85	SE 1/4	243	4	Architectural	Nail	proximal, cut		1835-1900	
85	SE 1/4	243	3	Architectural	Nail	medial, cut		1815-1900	
85	SE 1/4	243	1	Architectural	Nail	medial, indeterminate			
89	S 1/2	216	22	Activities	Sheet Tin/Tinned Iron	tin fragments			
89	N 1/2	217	2	Kitchen	Container Glass	olive indeterminate fragment			
89	N 1/2	220	1	Architectural	Nail	whole, unaltered, cut	5 p	1835-1900	
89	N 1/2	220	1	Kitchen	Container Glass	dark olive bottle fragment			
93	SE 1/4	107	1	Architectural	Nail	proximal, cut		1835-1900	
93	SE 1/4	107	1	Architectural	Nail	proximal, wrought			
93	NE 1/4	122	3	Activities	Other	slag			
95	NW 1/4	48	4	Architectural	Nail	indeterminate			heavily corroded
95	NW 1/4	49	1	Clothing	Button	4 hole porcelain	10.4 mm	1840-	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
95	NW 1/4	50	1	Clothing	Button	4 hole porcelain	10.75 mm	1840-	
95	ABOVE F95A	51	1	Arms	Ammunition	percussion cap			
95	SW 1/4- ABOVE F95A	51	1	Kitchen	Ceramic	indeterminate stoneware indeterminate sherd			
95	SW 1/4	51	1	Tobacco Pipe	Tobacco Pipe	fluted earthenware			
95	Left side	59	1	Clothing	Button	corroded and fragmentary			
95	NE 1/4	62	1	Clothing	Button	corroded and fragmentary			
95	NE 1/4	64	1	Clothing	Button	2 hole porcelain	11.17 mm	1840-	red calico
95	NE 1/4	65	1	Clothing	Button	corroded	20.25 mm		
95	NE 1/4	66	1	Clothing	Button	badly corroded	21.12 mm		
95	NE 1/4	67	1	Clothing	Button	badly corroded	21.32 mm		
95	NE 1/4	68	1	Clothing	Button	corroded	20.54 mm		
95	NE 1/4	69	1	Clothing	Button	badly corroded	20.72 mm		
95	NE 1/4	70	1	Clothing	Button	Goldstone?	8 mm		
95	NE 1/4	72	1	Arms	Ammunition	.31 cal round shot	0.318		
95	NE 1/4	73	1	Clothing	Button	corroded and fragmentary			
95	NW 1/4	78	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
95	NW 1/4	78	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
95	Right innominate	80	1	Clothing	Button	corroded	21.7 mm		
95	Left Ribs	81	1	Clothing	Button	corroded	21 mm		
95	Left Ribs	83	1	Clothing	Button	4 hole porcelain	10.47 mm	1840-	
95	Right Ribs	85	1	Clothing	Button	corroded	20.85 mm		
95	SW 1/4	93	1	Architectural	Nail	proximal, cut		1835-1900	
95	SW 1/4	93	1	Architectural	Nail	medial, cut		1815-1900	
95	SE 1/4	763	1	Activities	Other	cinder			
95	SE 1/4	763	2	Activities	Other	ferrous wire fragments			
95	SE 1/4	763	1	Architectural	Window Glass	blue/green	2.43 mm		
95	SE 1/4	763	1	Architectural	Nail	medial, cut		1815-1900	
95	SE 1/4 LV.1	763	1	Arms	Ammunition	.31 cal round shot	0.314		
95	NE 1/4	764	6	Clothing	Button	possible button frags			
95	SE 1/4	765	1	Architectural	Nail	proximal, cut		1835-1900	
95	SE 1/4	765	3	Architectural	Nail	medial, cut		1815-1900	
95	SE 1/4 LV. 2	765	1	Arms	Ammunition	.31 cal round shot	0.314		
95	SE 1/4	765	2	Kitchen	Container Glass	blue/green indeterminate fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
95	NE 1/4	766	1	Architectural	Nail	proximal, cut		1835-1900	
95	NE 1/2	766	1	Arms	Ammunition	.31 cal round shot	0.326		
98	N 1/2	110	26	Architectural	Brick	handmade	174.1 g		
98	N 1/2	110	7	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
98	N 1/2	110	1	Architectural	Nail	whole, pulled, cut	12 p	1835-1900	
98	N 1/2	110	1	Architectural	Nail	whole, pulled, cut	6 p	1835-1900	
98	N 1/2	110	1	Architectural	Nail	whole, clinched, cut	12 p	1835-1900	
98	N 1/2	110	8	Architectural	Nail	proximal, cut		1835-1900	
98	N 1/2	110	4	Architectural	Nail	medial, cut		1815-1900	
98	N 1/2	110	8	Architectural	Nail	distal, cut		1815-1900	
98	N 1/2	110	1	Tobacco Pipe	Tobacco Pipe	unglazed earthenware			
98	S 1/2	114	1	Architectural	Nail	distal, cut		1815-1900	
98	S 1/2	114	1	Clothing	Button	4 hole porcelain	10.72 mm	1840-	
98	S 1/2	114	1	Kitchen	Container Glass	light blue/green bottle fragment		1840-1885	
98	S 1/2	767	2	Kitchen	Container Glass	colorless indeterminate fragment			
100	S 1/2	44	1	Architectural	Brick	handmade	272 g		
100	S 1/2	44	1	Kitchen	Container Glass	olive bottle fragment			
100	N 1/2	46	1	Kitchen	Container Glass	aqua bottle fragment			
106	S 1/2	516	1	Kitchen	Container Glass	olive bottle fragment			
106	S 1/2	516	11	Kitchen	Container Glass	olive bottle fragment			
106	S 1/2	516	2	Kitchen	Container Glass	olive bottle fragment			
106	N 1/2	517	3	Kitchen	Container Glass	olive bottle fragment			
106	N 1/2	517	1	Kitchen	Container Glass	olive bottle fragment			
107	All	319	1	Activities	Hardware	cuprous padlock fly			
107	All	319	1	Architectural	Nail	proximal/medial, cut		1835-1900	
107	All	319	1	Architectural	Nail	medial, cut		1815-1900	
107	All	319	1	Architectural	Nail	medial, cut		1815-1900	
107	All	319	1	Clothing	Button	4 hole prosser	10.24 mm		white disk button
109	W 1/2	255	1	Architectural	Nail	whole, pulled, cut	5 p	1835-1900	
109	W 1/2	255	1	Kitchen	Container Glass	amber indeterminate fragment			
109	E 1/2	257	10	Activities	Sheet Tin/Tinned Iron	tin fragments			
109	E 1/2	257	4	Architectural	Nail	proximal, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
109	E 1/2	257	1	Arms	Ammunition	.64 cal round ball	0.6395		
109	E 1/2	257	1	Kitchen	Container Glass	colorless indeterminate fragment			
109	E 1/2	257	1	Tobacco Pipe	Tobacco Pipe	fluted redware			
109	E 1/2	257	1	Tobacco Pipe	Tobacco Pipe	fluted redware			
151	N 1/2	570	2	Architectural	Nail	whole, pulled, wire	16 p	1900-	
151	N 1/2 Zone I	570	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
151	N 1/2	570	1	Kitchen	Container Glass	light aqua indeterminate fragment			
151	N 1/2	570	2	Kitchen	Container Glass	olive bottle fragment			
151	N 1/2 Zone II	571	1	Activities	Other	ferrous object			
151	N 1/2	571	1	Kitchen	Container Glass	colorless indeterminate fragment			
151	N 1/2	571	1	Kitchen	Container Glass	olive bottle fragment			
152	W 1/2	507	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
152	W 1/2	507	1	Architectural	Brick	handmade	141.8 g		
152	W 1/2	507	1	Architectural	Nail	medial, cut		1815-1900	
203	S 1/2	8	1	Kitchen	Container Glass	olive bottle fragment			
204	S 1/2	4	4	Activities	Other	cinder			
204	S 1/2	4	1	Architectural	Brick	handmade	87.7 g		
204	S 1/2	4	1	Architectural	Nail	proximal, cut		1835-1900	
204	S 1/2	4	1	Kitchen	Container Glass	colorless bottle fragment			
204	S 1/2	4	1	Kitchen	Container Glass	colorless bottle fragment			
204	N 1/2	5	1	Activities	Other	ferrous fragments			very small fragments
204	N 1/2	5	1	Kitchen	Container Glass	colorless indeterminate fragment			
204	N 1/2	7	1	Kitchen	Ceramic	undecorated hotelware mug sherd		lt19th-mid20th	
210	E 1/2	10	1	Activities	Other	small ferrous cylinder fragment			
210	E 1/2	10	3	Architectural	Nail	proximal, cut		1835-1900	
210	E 1/2	10	2	Architectural	Nail	medial, cut		1815-1900	
210	E 1/2	10	1	Architectural	Nail	distal, clinched, cut		1815-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
210	E 1/2	10	1	Clothing	Button	corroded	17.58 mm		
210	E 1/2	10	1	Kitchen	Container Glass	olive indeterminate fragment			
210	W 1/2	17	2	Activities	Other	ferrous wire fragments			
210	W 1/2	17	3	Architectural	Brick	handmade	35.3 g		
210	W 1/2	20	25	Activities	Other	indeterminate ferrous fragments			
210	W 1/2	20	5	Architectural	Nail	medial, cut		1815-1900	
210	W 1/2	20	5	Architectural	Nail	proximal, cut		1835-1900	
210	W 1/2	20	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
210	W 1/2	20	1	Architectural	Nail	medial, clinched, cut		1815-1900	
210	W 1/2	20	1	Arms	Ammunition	percussion cap			
210	W 1/2	20	3	Kitchen	Ceramic	blue edge decorated cc ware plate sherd		1830-1860	
210	W 1/2	20	1	Kitchen	Ceramic	blue edge decorated cc ware plate sherd		1830-1860	
210	W 1/2	20	4	Kitchen	Ceramic	blue edge decorated cc ware plate sherd		1830-1860	
210	W 1/2	20	1	Kitchen	Container Glass	amber mug fragment			
210	W 1/2	20	1	Kitchen	Container Glass	dark blue/green panel bottle fragment			
210	W 1/2	20	1	Kitchen	Container Glass	dark olive bottle fragment			
210	W 1/2	20	1	Kitchen	Container Glass	dark olive bottle fragment			
210	W 1/2	20	5	Kitchen	Container Glass	light blue/green indeterminate fragment			
212	S 1/2	14	4	Activities	Other	cinder			
212	S 1/2	14	2	Activities	Other	ferrous metal fragments			
212	S 1/2	14	11	Activities	Sheet Tin/Tinned Iron	tin fragments			
212	S 1/2	14	3	Architectural	Nail	medial, cut		1815-1900	
212	S 1/2	14	1	Architectural	Nail	proximal, cut		1835-1900	
212	S 1/2	14	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
212	S 1/2	14	1	Clothing	Button	4 hole porcelain	10.32 mm	1840-	80%
212	S 1/2	14	5	Kitchen	Kitchenware	three-tine fork fragments			
212	S 1/2 22 cm bed	16	49	Activities	Sheet Tin/Tinned Iron	tin fragments			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
212	Hearth N 1/2	19	2	Architectural	Nail	cut		1815-1900	
212	Hearth N 1/2	19	7	Architectural	Nail	proximal, cut		1835-1900	
212	N 1/2	19	2	Kitchen	Container Glass	colorless indeterminate fragment			
212	N 1/2	23	1	Architectural	Nail	proximal, cut		1835-1900	
212	Hearth S 1/2	24	4	Architectural	Nail	proximal, cut		1835-1900	
212	HEARTH S 1/2	24	1	Arms	Ammunition	.69 cal round ball	0.6875		
212	N 1/2	25	1	Activities	Hardware	"U" staple			
212	N 1/2	25	1	Architectural	Brick	handmade	9.9 g		
212	N 1/2	25	1	Architectural	Nail	distal, cut		1815-1900	
212	N 1/2	25	6	Architectural	Nail	cut		1815-1900	
212	N 1/2	25	5	Architectural	Nail	proximal, cut		1835-1900	
212	N 1/2	25	5	arms	Accoutrements	cuprous S-shaped chain links			possible canteen chain?
212	N 1/2	25	1	Arms	Ammunition	.69 cal round ball	0.6875		
212	N 1/2	25	1	Kitchen	Ceramic	undecorated hotelware bowl sherd		1909-	
212	N 1/2	25	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
212	N 1/2	25	1	Kitchen	Ceramic	undecorated ironstone indeterminate sherd			
215	W 1/2	18	9	Activities	Other	cinder			
215	W 1/2	18	12	Activities	Crate Band	ferrous crate band fragment			
215	W 1/2	18	2	Activities	Other	ferrous wire fragments			
215	W 1/2	18	24	Activities	Sheet Tin/Tinned Iron	tin fragments			
215	W 1/2	18	5	Architectural	Brick	handmade	108.3 g		
215	W 1/2	18	1	Architectural	Other	mortar	42.7 g		
215	W 1/2	18	21	Architectural	Nail	medial, cut		1815-1900	
215	W 1/2	18	2	Architectural	Nail	distal, pulled, cut		1815-1900	
215	W 1/2	18	1	Architectural	Nail	medial, pulled, cut		1815-1900	
215	W 1/2	18	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
215	W 1/2	18	4	Architectural	Nail	proximal, pulled, cut		1835-1900	
215	W 1/2	18	1	Architectural	Nail	proximal, cut		1835-1900	L head
215	W 1/2	18	36	Architectural	Nail	proximal, cut		1835-1900	
215	W 1/2	18	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
215	W 1/2	18	1	Architectural	Nail	whole, unaltered, cut	8 p	1835-1900	
215	W 1/2	18	1	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	
215	W 1/2	18	1	Arms	Other	lead			
215	W 1/2	18	1	Arms	Ammunition	.54 cal Minie ball	0.5365		
215	W 1/2	18	1	Clothing	Button	corroded possible Eagle button cap	14.68 mm		
215	W 1/2	18	3	Kitchen	Ceramic	stick spatter cc ware holloware sherd		1850-1900	
215	W 1/2	18	1	Kitchen	Ceramic	undecorated cc ware cup sherd		1830-1860	
215	W 1/2	18	3	Kitchen	Ceramic	undecorated cc ware indeterminate sherd		1830-	
215	W 1/2	18	1	Kitchen	Ceramic	undecorated hotelware bowl sherd		1916-1952	
215	W 1/2	18	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
215	W 1/2	18	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
215	W 1/2	18	10	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
215	W 1/2	18	4	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
215	W 1/2	18	1	Kitchen	Ceramic	indeterminate stoneware indeterminate sherd			
215	W 1/2	18	1	Kitchen	Ceramic	annular yellowware straight sided bowl sherd		1830-	
215	W 1/2	18	1	Kitchen	Container Glass	aqua bottle fragment			
215	W 1/2	18	4	Kitchen	Container Glass	aqua bottle fragment			
215	W 1/2	18	5	Kitchen	Container Glass	colorless bottle fragment			
215	W 1/2	18	10	Kitchen	Container Glass	colorless indeterminate fragment			
215	W 1/2	18	3	Kitchen	Container Glass	colorless indeterminate fragment			
215	W 1/2	18	1	Kitchen	Container Glass	colorless jar fragment			
215	W 1/2	18	18	Kitchen	Container Glass	dark blue/green indeterminate fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
215	W 1/2	18	3	Kitchen	Container Glass	dark blue/green jar fragment			
215	W 1/2	18	3	Kitchen	Container Glass	dark blue/green jar fragment			
215	W 1/2	18	6	Kitchen	Container Glass	light aqua indeterminate fragment			
215	W 1/2	18	1	Kitchen	Container Glass	light aqua jar fragment			
215	W 1/2	18	15	Kitchen	Container Glass	light blue/green indeterminate fragment			
215	W 1/2	18	3	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	1	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	8	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	1	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	1	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	1	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	1	Kitchen	Container Glass	olive bottle fragment			
215	W 1/2	18	10	Kitchen	Container Glass	olive indeterminate fragment			
215	W 1/2	18	2	Kitchen	Container Glass	olive indeterminate fragment			
215	W 1/2	18	1	Personal	Combs	vulcanite comb tine			
215	E 1/2	29	2	Architectural	Brick	handmade	32.4 g		
215	E 1/2	29	1	Kitchen	Container Glass	light aqua bottle fragment			
215	E 1/2	30	1	Activities	Other	coal			
215	E 1/2	30	1	Activities	Other	granite			
215	E 1/2	30	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
215	E 1/2	30	5	Architectural	Nail	proximal, cut		1835-1900	
215	E 1/2	30	1	Architectural	Nail	medial, cut		1815-1900	
215	E 1/2	30	1	Architectural	Nail	medial, indeterminate			
215	E 1/2 UPPER LAYER	30	1	Arms	Ammunition	.54 cal round ball	0.534		
215	E 1/2	30	1	Clothing	Button	2 piece brass South Carolina seal	13.74 mm	1840-1860	
215	E 1/2	30	1	Clothing	Button	2 piece brass Eagle	19.85 mm		
215	E 1/2 upper layer	30	1	Kitchen	Ceramic	stick spatter cc ware indeterminate sherd		1850-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
215	E 1/2	30	15	Kitchen	Container Glass	aqua indeterminate fragment			
215	E 1/2	30	4	Kitchen	Container Glass	colorless bottle fragment			
215	E 1/2	30	1	Kitchen	Container Glass	colorless bottle fragment			
215	E 1/2	30	1	Kitchen	Container Glass	dark blue/green bottle fragment			
215	E 1/2	30	3	Kitchen	Container Glass	dark blue/green indeterminate fragment			
215	E 1/2	30	2	Kitchen	Container Glass	light blue/green bottle fragment			
215	E 1/2	30	9	Kitchen	Container Glass	light blue/green indeterminate fragment			
215	E 1/2	30	1	Kitchen	Container Glass	olive bottle fragment			
215	E 1/2	30	1	Kitchen	Container Glass	olive bottle fragment			
215	E 1/2	30	2	Kitchen	Container Glass	olive indeterminate fragment			
215	E 1/2	30	1	Kitchen	Kitchenware	fork			
215	E 1/2 Upper Zone	31	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
215	E 1/2	32	1	Activities	Crate Band	ferrous crate band fragment			
215	E 1/2 Lower Zone	32	205	Activities	Sheet Tin/Tinned Iron	tin fragments			
215	E 1/2	32	2	Architectural	Brick	handmade	74.2 g		
215	E 1/2	32	4	Architectural	Nail	proximal, cut		1835-1900	
215	E 1/2	32	2	Architectural	Nail	medial, cut		1815-1900	
215	E 1/2	32	1	Architectural	Nail	medial, pulled, cut		1815-1900	
215	E 1/2	32	1	Architectural	Nail	whole, unaltered, cut	16 p	1835-1900	
215	E 1/2 Lower Zone	32	6	Arms	Accoutrements	possible canteen fragments			
215	E 1/2 Lower Zone	32	1	Kitchen	Ceramic	indeterminate stoneware indeterminate sherd			
215	E 1/2	32	3	Kitchen	Container Glass	aqua bottle fragment			
215	E 1/2	32	1	Kitchen	Container Glass	aqua bottle fragment			
215	E 1/2	32	27	Kitchen	Container Glass	aqua indeterminate fragment			
215	E 1/2	32	1	Kitchen	Container Glass	aqua panel bottle fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
215	E 1/2	32	10	Kitchen	Container Glass	blue/green indeterminate fragment			
215	E 1/2	32	2	Kitchen	Container Glass	dark blue/green bottle fragment			
215	E 1/2	32	3	Kitchen	Container Glass	dark blue/green indeterminate fragment			
215	E 1/2	32	1	Kitchen	Container Glass	light aqua bottle fragment			
215	E 1/2	32	4	Kitchen	Container Glass	light aqua indeterminate fragment			
215	E 1/2	32	1	Kitchen	Container Glass	olive bottle fragment			
215	E 1/2	32	3	Kitchen	Container Glass	olive indeterminate fragment			
216	S 1/2	26	6	Activities	Other	ferrous metal fragment			
216	S 1/2	26	2	Architectural	Nail	medial, cut		1815-1900	
216	S 1/2	26	4	Architectural	Nail	proximal, cut		1835-1900	
216	S 1/2	26	1	Arms	Ammunition	.54 cal round ball	0.5255		
216	S 1/2	26	1	Arms	Ammunition	.54 cal Minie ball	0.537		
216	S 1/2	26	1	Kitchen	Ceramic	undecorated hotelware cup sherd		lt19th-mid20th	
216	S 1/2	26	4	Kitchen	Container Glass	dark olive bottle fragment			
216	S 1/2	26	1	Kitchen	Container Glass	olive bottle fragment			
216	S 1/2	26	1	Personal	Other	copper carpet bag latch			
216	N 1/2	34	1	Kitchen	Container Glass	colorless indeterminate fragment			
216	N 1/2	35	1	Activities	Other	ferrous metal fragment			
216	N 1/2	35	3	Architectural	Nail	proximal, cut		1835-1900	
216	N 1/2	35	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
216	N 1/2	35	11	Architectural	Nail	medial, cut		1815-1900	
216	N 1/2	35	1	Arms	Ammunition	percussion cap			
216	N 1/2	35	1	Arms	Other	lead			
216	N 1/2	35	3	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1830-1860	
216	N 1/2	35	1	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1830-1860	
216	N 1/2	35	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1860	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
216	N 1/2	35	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1860	
216	N 1/2	35	3	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1860	
216	N 1/2	35	1	Kitchen	Ceramic	alkaline glazed ext. stoneware jug sherd		1780-1900	
216	N 1/2	35	1	Kitchen	Ceramic	salt glazed ext. stoneware jug/crock sherd		1780-1900	
216	N 1/2	35	1	Kitchen	Container Glass	amber bottle fragment			
216	N 1/2	35	2	Kitchen	Container Glass	blue/green bottle fragment			
216	N 1/2	35	1	Kitchen	Container Glass	colorless lamp chimney fragment			
216	N 1/2	35	1	Kitchen	Container Glass	dark olive bottle fragment			
216	N 1/2	35	10	Kitchen	Container Glass	dark olive bottle fragment			
216	N 1/2	35	1	Kitchen	Container Glass	dark olive bottle fragment		1840-1885	
216	N 1/2	35	2	Kitchen	Container Glass	olive bottle fragment			
216	Hearth N 1/2	36	1	Activities	Other	woven cord			poss. Window sash cord
216	N 1/2	36	19	Architectural	Nail	cut		1815-1900	
216	N 1/2	36	1	Architectural	Nail	proximal, cut		1835-1900	
216	N 1/2	36	6	Architectural	Nail	cut		1815-1900	corroded
216	HEARTH N 1/2	36	2	Kitchen	Ceramic	indeterminate cc ware plate sherd		1830-1860	
216	N 1/2	36	1	Kitchen	Container Glass	colorless bottle fragment			
216	N 1/2	36	1	Kitchen	Container Glass	olive bottle fragment			
217	W 1/2	270	6	Architectural	Brick	handmade	184.6 g		
217	W 1/2	270	1	Architectural	Brick	handmade	80.5 g		
217	W 1/2	270	12	Architectural	Nail	cut		1815-1900	
217	W 1/2	270	9	Architectural	Nail	proximal, cut		1835-1900	
217	W 1/2	270	2	Architectural	Nail	proximal, pulled, cut		1835-1900	
217	W 1/2	270	1	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	
217	W 1/2	270	1	Architectural	Nail	whole, clinched, cut	12 p	1835-1900	
217	W 1/2	270	1	arms	Accoutrements	cuprous wire loop	11 mm		possible friction primer wire
217	W 1/2 LAYER 1	270	1	Arms	Ammunition	percussion cap			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
217	W 1/2 Layer 1	270	1	Kitchen	Ceramic	undecorated cc ware indeterminate sherd		1830-	
217	W 1/2	270	1	Kitchen	Container Glass	aqua bottle fragment			
217	W 1/2	270	2	Kitchen	Container Glass	blue/green indeterminate fragment			
217	W 1/2	270	1	Kitchen	Container Glass	colorless indeterminate fragment			
217	W 1/2	270	1	Kitchen	Container Glass	colorless vial fragment			
217	W 1/2	270	4	Kitchen	Container Glass	dark olive bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	dark olive bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	dark olive bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	light aqua bottle fragment			
217	W 1/2	270	2	Kitchen	Container Glass	light blue/green bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	light olive bottle fragment			
217	W 1/2	270	5	Kitchen	Container Glass	light olive bottle fragment			
217	W 1/2	270	2	Kitchen	Container Glass	light olive bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	light olive indeterminate fragment			
217	W 1/2	270	1	Kitchen	Container Glass	olive bottle fragment			
217	W 1/2	270	1	Kitchen	Container Glass	olive bottle fragment			
217	W 1/2	270	30	Kitchen	Container Glass	olive indeterminate fragment			
217	Layer 2	271	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
217	W 1/2	271	2	Architectural	Brick	handmade	54.9 g		
217	W 1/2	271	3	Architectural	Nail	proximal, cut		1835-1900	
217	W 1/2	271	2	Architectural	Nail	proximal, pulled, cut		1835-1900	
217	W 1/2 LAYER 2	271	1	Arms	Accoutrements	cartridge box finial			
217	W 1/2	271	10	Clothing	Other	rubber			
217	W 1/2	271	1	Kitchen	Container Glass	light aqua indeterminate fragment			
217	W 1/2	271	1	Kitchen	Container Glass	olive indeterminate fragment			
217	W 1/2	272	1	Architectural	Brick	handmade	41.3 g		

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
217	W 1/2	272	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
217	W 1/2	272	1	Architectural	Nail	medial, cut		1815-1900	
217	W 1/2	272	1	Architectural	Nail	whole, clinched, cut		1835-1900	
217	W 1/2	272	6	Architectural	Nail	proximal, cut		1835-1900	
217	W 1/2	272	1	Architectural	Nail	whole, clinched, wrought			
217	W 1/2	272	1	Kitchen	Container Glass	olive indeterminate fragment			
217	W 1/2	272	1	Kitchen	Kitchenware	ferrous kettle lid fragment			
217	E 1/2	279	1	Kitchen	Container Glass	light aqua bottle fragment			
217	E 1/2	280	1	Architectural	Nail	medial, cut		1815-1900	
217	E 1/2	280	2	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	280	6	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2	294	3	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2	294	1	Personal	Combs	vulcanite comb tine			
217	E 1/2	296	1	Architectural	Nail	medial, cut		1815-1900	
217	E 1/2	296	1	Clothing	Button	corroded	21.45 mm		
217	E 1/2	296	2	Kitchen	Container Glass	colorless indeterminate fragment			
217	E 1/2	298	1	Architectural	Nail	distal, cut		1815-1900	
217	E 1/2	301	2	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	301	2	Architectural	Nail	proximal, pulled, cut		1835-1900	
217	E 1/2	301	3	Architectural	Nail	cut		1815-1900	
217	E 1/2 Zone I	301	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	301	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	301	1	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2 Zone I	302	12	Activities	Sheet Tin/Tinned Iron	tin fragments			
217	E 1/2	302	3	Architectural	Nail	medial, cut		1815-1900	
217	E 1/2	302	1	Architectural	Nail	distal, cut		1815-1900	
217	E 1/2	302	9	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	302	3	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	
217	E 1/2	302	2	Architectural	Nail	proximal, pulled, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
217	E 1/2 ZONE II	302	1	Arms	Ammunition	gun flint			
217	E 1/2	302	1	Clothing	Other Fasteners	ferrous suspender buckle			
217	E 1/2 Zone 2	302	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2 Zone 2	302	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	302	1	Kitchen	Container Glass	colorless indeterminate fragment			
217	E 1/2	302	1	Kitchen	Container Glass	light blue/green indeterminate fragment			
217	E 1/2	302	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	302	4	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	302	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	302	3	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	302	35	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2	302	2	Personal	Combs	vulcanite comb tine			
217	E 1/2 Zone II	303	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
217	E 1/2	303	4	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	303	3	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	4	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	3	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	303	2	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2	304	1	Activities	Hardware	screw		1840-	
217	E 1/2 Zone II	304	2	Activities	Sheet Tin/Tinned Iron	tin fragments			
217	E 1/2	304	6	Architectural	Nail	medial, cut		1815-1900	
217	E 1/2	304	1	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
217	E 1/2	304	11	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	304	1	Architectural	Nail	whole, clinched, cut	5 p	1835-1900	
217	E 1/2	304	1	Architectural	Nail	whole, clinched, cut	7 p	1835-1900	
217	E 1/2 ZONE II	304	1	Arms	Ammunition	.54 cal Minie ball	0.538		
217	E 1/2	304	1	Clothing	Button	4 hole porcelain	10.36 mm	1840-	
217	E 1/2 Zone II	304	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2 Zone II	304	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	304	1	Kitchen	Container Glass	colorless indeterminate fragment			
217	E 1/2	304	1	Kitchen	Container Glass	light blue/green indeterminate fragment			
217	E 1/2	304	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2	304	44	Kitchen	Container Glass	olive indeterminate fragment			
217	E 1/2	304	2	Personal	Combs	vulcanite comb tine			
217	E 1/2	305	5	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2 Zone II	305	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2 Zone II	305	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	305	1	Kitchen	Container Glass	dark olive bottle fragment			
217	E 1/2	305	5	Kitchen	Container Glass	light olive bottle fragment			
217	E 1/2	305	4	Kitchen	Container Glass	light olive indeterminate fragment			
217	E 1/2	305	1	Personal	Combs	vulcanite comb tine			
217	E 1/2	306	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
217	E 1/2	306	1	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	306	1	Architectural	Nail	medial, pulled, cut		1815-1900	
217	E 1/2 ZONE III	306	1	Arms	Ammunition	.54 cal round ball	0.525		
217	E 1/2	306	1	Kitchen	Container Glass	olive bottle fragment			
217	E 1/2 Zone IV	307	40	Activities	Sheet Tin/Tinned Iron	tin fragments			
217	E 1/2	307	2	Architectural	Nail	proximal, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
217	E 1/2 Zone IV	307	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	307	3	Kitchen	Container Glass	dark olive bottle fragment			
217	E 1/2	307	4	Kitchen	Container Glass	light olive bottle fragment			
217	E 1/2 Zone IV	308	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2 Zone V	309	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
217	E 1/2	309	1	Kitchen	Kitchenware	dutch oven lid fragment			
217	E 1/2	310	1	Architectural	Nail	cut		1815-1900	
217	E 1/2	311	6	Architectural	Nail	proximal, cut		1835-1900	
217	E 1/2	311	1	Architectural	Nail	distal, cut		1815-1900	
217	E 1/2	311	1	Architectural	Nail	medial, pulled, cut		1815-1900	
217	E 1/2	311	1	Architectural	Nail	cut		1815-1900	
217	E 1/2	760	2	Architectural	Nail	proximal, cut		1835-1900	recovered from wood sample
217	E 1/2	760	1	Architectural	Nail	medial, cut		1815-1900	recovered from wood sample
218	N 1/2	262	1	Kitchen	Container Glass	light aqua indeterminate fragment			
219	S 1/2 Zone I	295	3	Kitchen	Ceramic	undecorated cc ware cosmetic jar sherd		1830-1870	
219	S 1/2 Zone I	295	3	Kitchen	Ceramic	undecorated cc ware cosmetic jar sherd		1830-1870	
219	S 1/2 Zone I	295	1	Kitchen	Ceramic	dodecagon paneled ironstone plate sherd		1845-1865	
219	S 1/2 Zone I	295	1	Kitchen	Ceramic	undecorated ironstone indeterminate sherd			
219	N 1/2 Zone I	300	1	Activities	Other	ferrous fragments			very small fragments
221	NW 1/4	399	1	Activities	Other	ferrous fragments			very small fragments
221	NW 1/4	399	1	Architectural	Nail	proximal, cut		1835-1900	
221	SE 1/4	403	1	Activities	Other	cinder			
221	SE 1/4	403	1	Activities	Other	coal			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
221	SE 1/4	403	4	Activities	Sheet Tin/Tinned Iron	tin fragments			
221	SE 1/4	403	2	Architectural	Brick	handmade	8 g		
221	SE 1/4	403	1	Architectural	Nail	medial, pulled, cut		1815-1900	
221	SE 1/4	403	3	Architectural	Nail	proximal, cut		1835-1900	
221	SE 1/4	403	1	Architectural	Nail	whole, clinched, cut	12 p	1835-1900	
221	SE 1/4	403	1	Clothing	Other	Leather fragment			
221	SE 1/4	403	1	Kitchen	Ceramic	alkaline glazed ext. stoneware jug/crock sherd		1780-1900	
221	SE 1/4	403	17	Kitchen	Container Glass	dark olive bottle fragment			
221	SE 1/4	403	1	Kitchen	Container Glass	dark olive bottle fragment			
221	SE 1/4	403	1	Personal	Combs	vulcanite comb tine			
221	NE 1/4	404	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
221	NE 1/4	404	2	Architectural	Nail	proximal, cut		1835-1900	
221	NE 1/4	404	1	Architectural	Nail	distal, pulled, cut		1815-1900	
221	NE 1/4	404	1	Architectural	Nail	proximal, cut		1835-1900	
221	NE 1/4	404	3	Architectural	Nail	indeterminate			
221	NE 1/4	404	1	Arms	Ammunition	.54 cal round ball	0.5225		
221	NE 1/4	404	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
221	NE 1/4	404	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
221	NE 1/4	404	1	Kitchen	Ceramic	undecorated hotelware plate sherd		lt19th-mid20th	
221	SW 1/4	405	1	Activities	Hardware	railroad spike			
221	SW 1/4	405	12	Activities	Sheet Tin/Tinned Iron	tin fragments			
221	SW 1/4	405	1	Architectural	Brick	handmade	31 g		
221	SW 1/4	405	2	Architectural	Nail	proximal, cut		1835-1900	
221	SW 1/4	405	4	Architectural	Nail	medial, cut		1815-1900	
221	SW 1/4	405	1	Arms	Ammunition	.54 cal round ball	0.5205		
221	SW 1/4	405	1	Personal	Writing Implements	graphite pencil lead			
221	SW 1/4	405	3	Personal	Combs	vulcanite comb tine			
221	NW 1/4	406	1	Activities	Hardware	railroad spike			
221	NW 1/4	406	5	Architectural	Nail	cut		1815-1900	
221	NW 1/4	406	1	Architectural	Nail	proximal, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
221	NW 1/4	406	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
221	NW 1/4	406	9	Architectural	Nail	medial, cut		1815-1900	
221	NW 1/4	406	1	Arms	Ammunition	.54 cal Minie ball	0.5375		
223	SE 1/4	53	1	Architectural	Window Glass	light blue/green	1.91 mm		
223	SE 1/4	53	23	Architectural	Nail	medial, cut		1815-1900	
223	SE 1/4	53	13	Architectural	Nail	proximal, cut		1835-1900	
223	SE 1/4	53	2	Arms	Ammunition	percussion cap			
223	SE 1/4	53	1	Arms	Ammunition	percussion cap			
223	SE 1/4	53	1	Arms	Ammunition	percussion cap			
223	SE 1/4	53	1	Arms	Ammunition	.64 cal round ball	0.6445		
223	SE 1/4	53	1	Clothing	Button	2 piece brass Eagle	19.78 mm	1849-1865	
223	SE 1/4	53	1	Clothing	Button	2 piece brass Eagle	14.52 mm	1845-1865	
223	SE 1/4	53	1	Clothing	Other Fasteners	ferrous buckle			
223	SE 1/4	53	1	Kitchen	Container Glass	colorless bottle fragment			
223	SE 1/4	53	7	Kitchen	Container Glass	light blue/green bottle fragment			
223	SE 1/4	53	2	Kitchen	Container Glass	light blue/green bottle fragment			
223	SE 1/4	53	1	Kitchen	Container Glass	light olive bottle fragment			
223	SE 1/4	53	1	Kitchen	Container Glass	olive bottle fragment			
223	SE 1/4	53	28	Kitchen	Container Glass	olive bottle fragment			
223	SE 1/4	53	1	Kitchen	Kitchenware	ferrous corkscrew			
223	SE 1/4	53	3	Personal	Combs	vulcanite comb tine			
223	SE 1/4	53	2	Personal	Other	vulcanite fragment			possible hand carved ring-rectangular-broken
223	SE 1/4	54	1	Activities	Other	ferrous metal fragment			
223	SE 1/4	56	2	Architectural	Brick	handmade	151 g		
223	SE 1/4	57	1	Architectural	Brick	handmade	3372 g		
223	SE 1/4	58	4	Architectural	Nail	medial, cut		1815-1900	
223	SE 1/4	58	1	Architectural	Nail	proximal, cut		1835-1900	
223	SE 1/4	58	1	Arms	Ammunition	.64 cal round ball	0.625		
223	NE 1/4	71	1	Architectural	Nail	proximal, cut		1835-1900	
223	NE 1/4 Z 1	71	1	Arms	Ammunition	percussion cap			
223	NE 1/4	71	1	Clothing	Button	badly corroded	15.3 mm		

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
223	NE 1/4	74	1	Kitchen	Container Glass	olive bottle fragment			
223	NE 1/4	75	1	Architectural	Nail	medial, cut		1815-1900	
223	NE 1/4	75	1	Architectural	Nail	proximal, cut		1835-1900	
223	NE 1/4	75	1	Architectural	Nail	medial, indeterminate			
223	NE 1/4	75	1	Kitchen	Container Glass	light aqua bottle fragment			
223	NE 1/4	75	1	Kitchen	Container Glass	olive bottle fragment			
223	NE 1/4	84	6	Architectural	Nail	medial, cut		1815-1900	
223	NE 1/4	84	4	Architectural	Nail	proximal, cut		1835-1900	
223	NE 1/4	90	2	Architectural	Nail	proximal, cut		1835-1900	
223	NE 1/4	104	1	Architectural	Nail	proximal, cut		1835-1900	
223	SW 1/4	105	2	Activities	Other	slag			
223	SW 1/4	105	1	Architectural	Window Glass	light blue/green	1.05 mm		
223	SW 1/4	105	2	Architectural	Nail	proximal, cut		1835-1900	
223	SW 1/4 Z 1	105	1	Arms	Ammunition	percussion cap			
223	SW 1/4 Z 1	105	1	Arms	Ammunition	.31 cal round shot	0.3125		
223	SW 1/4	105	1	Clothing	Button	2 piece brass Eagle	14.53 mm	1840-1850	
223	SW 1/4	105	1	Kitchen	Container Glass	olive bottle fragment			
223	SW 1/4	108	7	Architectural	Nail	proximal, cut		1835-1900	
223	SW 1/4 Z 2	108	1	Arms	Ammunition	percussion cap			
223	SW 1/4 Z 2	108	1	Arms	Ammunition	percussion cap			
223	SW 1/4 Z 2	108	1	Arms	Ammunition	percussion cap			
223	SE 1/4 Z.2	108	1	Kitchen	Ceramic	alkaline glazed ext. stoneware jug sherd		1780-1900	
223	SW 1/4	112	1	arms	Accoutrements	brass cartridge box finial			
223	SW 1/4	121	1	Architectural	Window Glass	light blue/green	1.01 mm		
223	SW 1/4	121	6	Architectural	Nail	proximal, cut		1835-1900	
223	SW 1/4	121	2	Architectural	Nail	medial, cut		1815-1900	
223	SW 1/4	121	1	Architectural	Nail	whole, unaltered, cut	9 p	1815-1900	
223	SW 1/4 Z 3	121	1	Arms	Ammunition	.31 cal round shot	0.3185		
223	SW 1/4	121	3	Kitchen	Container Glass	light aqua bottle fragment			
223	SW 1/4	124	1	Architectural	Brick	handmade	725 g		
223	NW 1/4	130	1	Kitchen	Container Glass	olive bottle fragment			
223	NW 1/4	131	2	Architectural	Nail	medial, cut		1815-1900	
223	NW 1/4	135	3	Architectural	Window Glass	light blue/green	1.09 mm, 1.1 mm, 1.1 mm		
223	NW 1/4	135	3	Architectural	Nail	medial, cut		1815-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
223	NW 1/4	135	3	Architectural	Nail	proximal, cut		1835-1900	
223	NW 1/4	135	1	arms	Accoutrements	pewter canteen spout			
223	NW 1/4 Z 6	135	1	Arms	Ammunition	rifle bullet			
223	NW 1/4 Z 6	135	1	Arms	Ammunition	.31 cal round shot	0.3485		
223	NW 1/4	135	1	Clothing	Button	conserved	22.46 mm		
223	NW 1/4	135	1	Kitchen	Container Glass	amber bottle fragment			
223	NW 1/4	135	1	Kitchen	Container Glass	light aqua bottle fragment			
223	Hearth	149	6	Architectural	Nail	medial, cut		1815-1900	
223	Hearth	149	3	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth	154	1	Architectural	Nail	medial, cut		1815-1900	
223	Hearth Zone I	156	1	Activities	Other	ferrous fragments			very small fragments
223	Hearth	156	1	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth	156	1	Architectural	Nail	distal, cut		1815-1900	
223	Hearth	157	1	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth Zone I	158	5	Activities	Other	ferrous fragments			very small fragments
223	Hearth	166	3	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth	166	1	Architectural	Nail	medial, cut		1815-1900	
223	Hearth	166	1	Architectural	Nail	medial, pulled, cut		1815-1900	
223	Hearth Basin	167	1	Activities	Other	ferrous fragments			very small fragments
223	Hearth	167	1	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth	167	1	Architectural	Nail	medial, cut		1815-1900	
223	HEARTH BASIN-HEAVY FRACTION	167	1	Arms	Ammunition	percussion cap			
223	Hearth	169	1	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth	170	1	Architectural	Nail	proximal, cut		1835-1900	
223	Hearth basin	170	2	Kitchen	Container Glass	olive indeterminate fragment			
223	Fill beneath pipe	172	1	Activities	Hardware	ferrous chain			
223	Hearth floor ash	176	1	Activities	Other	ferrous fragments			very small fragments
225	N 1/2	40	2	Architectural	Brick	handmade	9.9 g		

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
225	N 1/2	43	1	Architectural	Brick	handmade	2.2 g		
236	N 1/2	127	1	Kitchen	Ceramic	undecorated hotelware indeterminate sherd		lt19th-mid20th	
236	N 1/2	127	1	Kitchen	Container Glass	dark olive bottle fragment			
236	S 1/2	128	1	Kitchen	Ceramic	undecorated hotelware indeterminate sherd		lt19th-mid20th	
236	S 1/2	129	1	Architectural	Nail	proximal, cut		1835-1900	
239	S 1/2	125	1	Architectural	Brick	handmade	1315 g		
239	SW 1/2	126	1	Activities	Hardware	railroad spike			
239	SW 1/2	126	4	Architectural	Brick	handmade	122.2 g		
239	SW 1/2	126	1	Architectural	Nail	proximal, cut		1835-1900	
239	SW 1/2	126	4	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
239	SW 1/2	126	3	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
239	SW 1/2	126	3	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
239	SW 1/2	126	1	Kitchen	Container Glass	amber bottle fragment			
239	SW 1/2	126	2	Kitchen	Container Glass	colorless indeterminate fragment			
239	SW 1/2	126	1	Kitchen	Container Glass	olive bottle fragment			
239	SW 1/2	126	1	Kitchen	Kitchenware	ferrous spoon bowl			
242	NW 1/2	55	1	Activities	Crate Band	ferrous crate band fragment			cut nail holes
242	NW 1/2	55	3	Architectural	Nail	distal, cut		1815-1900	
242	NW 1/2	55	1	Architectural	Nail	distal, pulled, cut		1815-1900	
242	NW 1/2	55	3	Architectural	Nail	medial, cut		1815-1900	
242	NW 1/2	55	11	Architectural	Nail	proximal, cut		1835-1900	
242	NW 1/2	55	2	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
242	NW 1/2	55	1	Architectural	Nail	whole, pulled, cut	8 p	1835-1900	
242	NW 1/2	55	1	Architectural	Nail	whole, clinched, cut	8 p	1835-1900	
242	NW 1/2 ZONE B DARK ZONE	55	1	Arms	Ammunition	percussion cap			
242	NW 1/2 ZONE B DARK ZONE	55	1	Arms	Ammunition	percussion cap			
242	NW 1/2 ZONE B DARK ZONE	55	1	Arms	Ammunition	percussion cap			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
242	NW 1/2 ZONE B DARK ZONE	55	1	Arms	Ammunition	percussion cap			
242	NW 1/2	55	1	Clothing	Button	button cap	21.9 mm		
242	NW 1/2	55	1	Kitchen	Container Glass	aqua panel bottle fragment			
242	NW 1/2	55	1	Kitchen	Container Glass	dark olive indeterminate fragment			
242	NW 1/2	55	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
242	NW 1/2	55	1	Kitchen	Container Glass	opaque olive bottle fragment			
242	NW 1/2	86	1	Clothing	Button	Block "I" button	25.3 mm		
242	NW 1/2	87	3	Architectural	Nail	whole, unaltered, cut	16 p	1835-1900	
242	NW 1/2	87	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
242	NW 1/2	87	1	Architectural	Nail	proximal, unaltered, cut		1835-1900	
242	NW 1/2	87	1	Architectural	Nail	medial, cut		1815-1900	
242	NW 1/2	87	1	Clothing	Button	one hole bone	16.45 mm		
242	NW 1/2	87	1	Clothing	Button	four hole bone	17.24 mm		
242	NW 1/2	89	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
242	NW 1/2	89	6	Architectural	Nail	proximal, cut		1835-1900	
242	NW 1/2	89	7	Architectural	Nail	medial, cut		1815-1900	
242	NW 1/2	89	1	Architectural	Nail	proximal, cut		1835-1900	
242	NW 1/2	89	1	Architectural	Nail	proximal, cut		1835-1900	
242	NW 1/2	89	1	Architectural	Nail	medial, cut		1815-1900	
242	NW 1/2 ZONE E DARK ZONE II	89	1	Arms	Ammunition	.31 cal round shot	0.3195		
242	NW 1/2 ZONE E DARK ZONE II	89	1	Arms	Ammunition	.31 cal round shot	0.3215		
242	NW 1/2	89	1	Clothing	Button	2 piece brass Eagle	15.8 mm		
242	NW 1/2	89	1	Clothing	Button	4 hole porcelain	9.35 mm	1840-	
242	NW 1/2	89	2	Kitchen	Container Glass	aqua bottle fragment			
242	NW 1/2	89	1	Kitchen	Container Glass	aqua indeterminate fragment			
242	NW 1/2	89	1	Kitchen	Container Glass	aqua panel bottle fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
242	NW 1/2	89	1	Kitchen	Container Glass	dark blue/green bottle fragment			
242	NW 1/2	89	2	Kitchen	Container Glass	dark blue/green bottle fragment			
242	NW 1/2	89	1	Kitchen	Container Glass	dark blue/green bottle fragment			
242	NW 1/2	89	1	Personal	Jewelry	vulcanite finger ring			
242	SE 1/2 Zone A	91	51	Activities	Sheet Tin/Tinned Iron	tin fragments			
242	SE 1/2	91	2	Architectural	Nail	proximal, cut		1835-1900	
242	SE 1/2	91	1	Architectural	Nail	proximal, indeterminate			
242	SE 1/2	99	2	Architectural	Nail	medial, cut		1815-1900	
242	SE 1/2	99	1	Kitchen	Container Glass	dark blue/green bottle fragment			
242	SE 1/2	99	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
242	SE 1/2 Zone B	100	5	Activities	Sheet Tin/Tinned Iron	tin fragments			
242	SE 1/2	100	8	Architectural	Nail	medial, cut		1815-1900	
242	SE 1/2	100	5	Architectural	Nail	proximal, cut		1835-1900	
242	SE 1/2	100	1	Architectural	Nail	proximal, pulled, cut		1835-1900	horseshoe nail
242	SE 1/2	100	1	Architectural	Nail	medial, pulled, cut		1815-1900	
242	SE 1/2	100	1	Architectural	Nail	proximal, cut		1835-1900	
242	SE 1/2	100	3	Architectural	Nail	proximal, pulled, cut		1835-1900	
242	SE 1/2	100	1	Architectural	Nail	whole, unaltered, cut	12 p	1815-1900	
242	SE 1/2	100	1	Kitchen	Container Glass	colorless indeterminate fragment			
242	SE 1/2	100	3	Kitchen	Container Glass	indeterminate indeterminate fragment			
242	SE 1/2	102	1	Personal	Jewelry	clasp			
246	Section C	118	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
247	S 1/2	137	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
248	W 1/2 DARK ZONE	140	1	Arms	Ammunition	percussion cap			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
248	W 1/2 LT ZONE	141	1	Arms	Ammunition	percussion cap			
248	W 1/2	141	1	Kitchen	Kitchenware	pewter spoon bowl			
248	E 1/2	145	1	Architectural	Nail	distal, cut		1815-1900	
248	E 1/2	147	1	Architectural	Nail	medial, cut		1815-1900	
248	E 1/2 ZONE III-HEAVY FRACTION	147	1	Arms	Ammunition	percussion cap			
248	E 1/2	160	1	Architectural	Nail	proximal, cut		1835-1900	
259	W 1/2	173	1	Architectural	Nail	proximal, cut		1835-1900	
259	W 1/2	173	1	Kitchen	Container Glass	colorless panel bottle fragment			
259	W 1/2	173	1	Kitchen	Container Glass	light amber indeterminate fragment			
259	W 1/2	173	1	Kitchen	Container Glass	light blue/green bottle fragment			
259	W 1/2	173	1	Kitchen	Container Glass	light blue/green indeterminate fragment			
261	N 1/2	187	2	Architectural	Brick	handmade	33 g		
261	N 1/2	187	1	Arms	Ammunition	.69 cal round ball	0.6565		
261	SE 1/2 ZONE A	189	4	Arms	Ammunition	percussion cap			
268	NE 1/2	171	5	Architectural	Brick	handmade	42.3 g		
272	E 1/2	142	1	Architectural	Nail	proximal, cut		1835-1900	
272	E 1/2	142	2	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	
272	E 1/2	142	2	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
272	E 1/2	142	10	Architectural	Brick	handmade	123.1 g		
272	E 1/2	142	3	Kitchen	Ceramic	undecorated porcelain small plate sherd			
272	E 1/2	142	1	Personal	Combs	vulcanite comb fragment			
272	W 1/2	143	1	Architectural	Brick	handmade	8.1 g		
272	W 1/2	143	2	Personal	Combs	vulcanite comb tine			
272	W 1/2	144	1	Activities	Hardware	ferrous bracket			3 mounting holes-poss. Wagon part
272	W 1/2 All Zones	144	51	Activities	Sheet Tin/Tinned Iron	tin fragments			
272	W 1/2 All Zones	144	3	Architectural	Nail	proximal, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
272	W 1/2 All Zones	144	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
272	W 1/2 ALL ZONES	144	1	Arms	Ammunition	percussion cap			
272	W 1/2 All Zones	144	2	Kitchen	Ceramic	undecorated porcelain small plate sherd			
272	W 1/2 All Zones	144	6	Kitchen	Kitchenware	round tin can fragments			
272	W 1/2 All Zones	144	1	Personal	Combs	vulcanite comb tine			
272	W 1/2	159	7	Architectural	Brick	handmade	226 g		
272	W 1/2	159	1	Architectural	Brick	handmade	124.6 g		
272	W 1/2	159	2	Architectural	Brick	handmade	404.3 g		
278	W 1/2	210	1	Architectural	Nail	proximal, cut		1835-1900	
278	W 1/2 LEVEL3	210	1	Arms	Ammunition	percussion cap			
286	W 1/2 HEARTH FILL ZONE I-HEAVY FRACTION	194	1	Arms	Ammunition	percussion cap			
286	W 1/2 Zone II	195	7	Activities	Other	ferrous fragments			very small fragments
286	W 1/2 Zone II	201	3	Activities	Sheet Tin/Tinned Iron	tin fragments			
295	E 1/2	215	4	Kitchen	Container Glass	olive bottle fragment			
295	E 1/2	215	1	Kitchen	Container Glass	olive bottle fragment			
295	E 1/2	223	1	Kitchen	Container Glass	olive bottle fragment			
295	E 1/2	223	1	Kitchen	Container Glass	olive bottle fragment			
295	E 1/2	223	2	Kitchen	Container Glass	olive bottle fragment			
295	W 1/2-HEAVY FRACTION	224	1	Arms	Ammunition	percussion cap			
295	W 1/2	224	1	Clothing	Button	3 piece brass Eagle	14.8 mm		
297	S 1/2	199	1	Arms	Ammunition	.31 cal round shot	0.3195		
305	E 1/2	226	1	Architectural	Nail	medial, cut		1815-1900	
305	E 1/2	226	1	Kitchen	Container Glass	light olive indeterminate fragment			
309	SW 1/2	244	1	Kitchen	Container Glass	olive bottle fragment			
309	NE 1/2 (post)	245	1	Kitchen	Container Glass	olive indeterminate fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
313	S 1/2	519	2	Activities	Other	cinder			
313	S 1/2	519	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
313	S 1/2	519	1	Architectural	Other	asbestos tile			intrusive
313	S 1/2	519	2	Architectural	Nail	proximal, cut		1835-1900	
313	S 1/2	519	1	Architectural	Nail	distal, cut		1815-1900	
313	S 1/2	519	3	Kitchen	Container Glass	indeterminate indeterminate fragment			
313	S 1/2	519	3	Kitchen	Container Glass	olive bottle fragment			
313	S 1/2	519	1	Kitchen	Container Glass	olive bottle fragment			
313	S 1/2	519	1	Kitchen	Container Glass	olive indeterminate fragment			
313	N 1/2	520	1	Activities	Other	ferrous wire fragment			
313	N 1/2	521	2	Activities	Other	ferrous wire fragments			
313	N 1/2	521	2	Architectural	Nail	proximal, cut		1835-1900	
313	N 1/2	521	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
313	N 1/2	521	1	Kitchen	Container Glass	olive bottle fragment			
313	N 1/2	521	2	Kitchen	Container Glass	olive indeterminate fragment			
325	SW 1/2	316	1	Architectural	Brick	handmade	72.7 g		
325	SW 1/2	316	1	Architectural	Nail	proximal, cut		1835-1900	
342	S 1/2	274	1	Kitchen	Container Glass	light olive bottle fragment			
342	N 1/2	276	1	Kitchen	Container Glass	light olive bottle fragment			
342	N 1/2	276	1	Kitchen	Container Glass	light olive bottle fragment			
342	N 1/2	276	1	Kitchen	Container Glass	light olive bottle fragment			
343	W 1/2	286	4	Architectural	Nail	medial, cut		1815-1900	
343	W 1/2	286	1	Arms	Ammunition	.31 cal round shot	0.312		
343	E 1/2-HEAVY FRACTION	290	3	Arms	Ammunition	percussion cap			
343	E 1/2	291	1	Architectural	Nail	medial, cut		1815-1900	
343	E 1/2 Level 1	291	1	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1830-1860	
346	S 1/2	338	2	Architectural	Nail	proximal, cut		1835-1900	
346	S 1/2	338	1	Arms	Ammunition	.64 cal round ball	0.64		
346	S 1/2	338	4	Kitchen	Container Glass	light olive bottle fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
346	S 1/2	338	1	Kitchen	Container Glass	light olive bottle fragment			
346	N 1/2	339	8	Activities	Sheet Tin/Tinned Iron	tin fragments			
346	N 1/2	339	2	Architectural	Nail	proximal, cut		1835-1900	
346	N 1/2	339	1	Kitchen	Container Glass	olive indeterminate fragment			
346	N 1/2	340	1	Activities	Other	ferrous fragments			very small fragments
346	N 1/2	340	1	Architectural	Nail	indeterminate			
346	N 1/2	340	1	Kitchen	Container Glass	olive indeterminate fragment			
348	S 1/2 Zone 1	329	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
348	S 1/2	329	1	Architectural	Nail	proximal, indeterminate			
348	S 1/2	329	5	Kitchen	Container Glass	aqua indeterminate fragment			
348	S 1/2	329	1	Kitchen	Container Glass	aqua indeterminate fragment			
348	S 1/2	329	9	Kitchen	Container Glass	aqua panel bottle fragment			
348	S 1/2	329	1	Kitchen	Container Glass	light blue/green bottle fragment			
348	S 1/2	329	3	Kitchen	Container Glass	light blue/green indeterminate fragment			
348	S 1/2	335	1	Activities	Hardware	ferrous bale handle			
348	S 1/2 Zone 2	335	22	Activities	Sheet Tin/Tinned Iron	tin fragments			
348	S 1/2	335	1	Architectural	Nail	proximal, cut		1835-1900	
348	S 1/2	335	4	Kitchen	Container Glass	aqua indeterminate fragment			
348	S 1/2	335	20	Kitchen	Container Glass	aqua panel bottle fragment			
348	S 1/2	335	1	Kitchen	Container Glass	aqua panel bottle fragment			
348	S 1/2	335	1	Kitchen	Container Glass	light blue/green bottle fragment			
348	S 1/2	335	4	Kitchen	Container Glass	light blue/green bottle fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
348	S 1/2	335	1	Kitchen	Container Glass	light blue/green bottle fragment			
348	S 1/2	335	2	Personal	Writing Implements	graphite pencil lead			
348	N 1/2 ZONE II	348	1	Arms	Ammunition	percussion cap			
352	W 1/2	350	6	Architectural	Brick	handmade	18.8 g		
352	E 1/2	353	2	Architectural	Brick	handmade	29.3 g		
352	E 1/2	353	2	Architectural	Nail	distal, cut		1815-1900	
352	E 1/2	353	1	Architectural	Nail	cut		1815-1900	
352	E 1/2	353	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
352	E 1/2	353	1	Kitchen	Container Glass	olive bottle fragment			
355	E 1/2	321	1	Architectural	Nail	proximal, cut		1835-1900	
355	E 1/2	321	1	Arms	Ammunition	.64 cal round ball	0.64		
355	E 1/2	321	1	Arms	Ammunition	.31 cal round shot	0.3185		
355	E 1/2	323	1	Architectural	Nail	proximal, cut		1835-1900	
356	W 1/2	330	33	Activities	Sheet Tin/Tinned Iron	tin fragments			
356	W 1/2	330	1	Architectural	Nail	proximal, cut		1835-1900	
356	W 1/2	330	1	Kitchen	Container Glass	olive bottle fragment			
356	W 1/2	330	1	Kitchen	Container Glass	olive bottle fragment			
356	W 1/2	330	1	Kitchen	Container Glass	olive indeterminate fragment			
356	W 1/2	331	28	Activities	Other	ferrous fragments			very small fragments
356	W 1/2	332	1	Kitchen	Container Glass	aqua panel bottle fragment			
360	W 1/2	374	1	Arms	Ammunition	percussion cap			
361	E 1/2	341	2	Activities	Other	ferrous wire fragments			
361	E 1/2	341	1	Kitchen	Container Glass	light olive bottle fragment			
361	W 1/2	346	1	Kitchen	Container Glass	light olive indeterminate fragment			
371	E 1/2	355	1	Architectural	Nail	proximal, cut		1835-1900	
371	E 1/2 ZONE I	355	1	Arms	Ammunition	percussion cap			
371	E 1/2 Zone I	355	6	Kitchen	Ceramic	salt glazed stoneware indeterminate sherd		1780-1900	
373	NE 1/4	326	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
373	N 1/4 east portion	327	1	Kitchen	Ceramic	jackfield like refined redware large holloware sherd			
373	NW 1/4	334	8	Activities	Sheet Tin/Tinned Iron	tin fragments			
373	SW 1/4	351	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
373	SW 1/4	351	2	Architectural	Nail	whole, unaltered, cut	4 p	1835-1900	
373	SW 1/4	351	3	Architectural	Nail	distal, cut		1815-1900	
373	SW 1/4	351	2	Architectural	Nail	medial, cut		1815-1900	
373	SW 1/4	351	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
373	SE 1/4	354	1	Architectural	Nail	proximal, cut		1835-1900	
373	SE 1/4	354	1	Architectural	Nail	medial, clinched, cut		1815-1900	
376	Plowscars	356	2	Architectural	Nail	medial, cut		1815-1900	
376	Plowscars	356	1	Kitchen	Container Glass	olive bottle fragment			
376	S 1/2	357	1	Activities	Other	cuprous/ferrous object			
376	S 1/2	357	2	Activities	Other	ferrous wire fragments			
376	S 1/2	357	4	Architectural	Nail	cut		1815-1900	
376	S 1/2	357	2	Architectural	Nail	proximal, cut		1835-1900	
376	S 1/2	357	3	Architectural	Nail	whole, unaltered, cut	12 p	1815-1900	
376	S 1/2	357	1	Arms	Ammunition	percussion cap			
376	S 1/2	357	1	Arms	Ammunition	percussion cap			
376	S 1/2	357	154	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
376	S 1/2	357	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
376	S 1/2	357	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
376	S 1/2	357	2	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
376	S 1/2	357	4	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
376	S 1/2	357	34	Kitchen	Container Glass	aqua indeterminate fragment			
376	S 1/2	357	2	Kitchen	Container Glass	aqua panel bottle fragment			
376	S 1/2	357	1	Kitchen	Container Glass	aqua panel bottle fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
376	S 1/2	357	1	Kitchen	Container Glass	aqua panel bottle fragment			
376	S 1/2	357	1	Kitchen	Container Glass	aqua panel bottle fragment			
376	S 1/2	357	7	Kitchen	Container Glass	light olive indeterminate fragment			
376	S 1/2	357	5	Kitchen	Container Glass	olive bottle fragment			
376	S 1/2	357	1	Kitchen	Container Glass	olive bottle fragment			
376	S 1/2	357	5	Kitchen	Container Glass	olive indeterminate fragment			
376	S 1/2	357	1	Personal	Combs	vulcanite comb tine			
376	N 1/2	369	1	Architectural	Nail	proximal, cut		1835-1900	
376	N 1/2	370	120	Activities	Sheet Tin/Tinned Iron	tin fragments			
376	N 1/2	370	2	Architectural	Nail	medial, cut		1815-1900	
376	N 1/2	370	3	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
376	N 1/2	370	32	Kitchen	Container Glass	aqua indeterminate fragment			
376	N 1/2	370	2	Kitchen	Container Glass	aqua panel bottle fragment			
376	N 1/2	370	1	Kitchen	Container Glass	aqua panel bottle fragment			
376	N 1/2	370	1	Kitchen	Container Glass	aqua panel bottle fragment			
376	N 1/2	370	3	Kitchen	Container Glass	light olive indeterminate fragment			
376	N 1/2	370	13	Kitchen	Container Glass	olive bottle fragment			
376	N 1/2	370	1	Kitchen	Container Glass	olive bottle fragment			
376	N 1/2	370	2	Kitchen	Container Glass	olive bottle fragment			
376	N 1/2	370	5	Kitchen	Container Glass	olive bottle fragment			
376	N 1/2	370	1	Kitchen	Container Glass	olive bottle fragment			
377	SW 1/2	383	1	Architectural	Nail	proximal, cut		1835-1900	
377	SW 1/2	383	1	Kitchen	Container Glass	aqua indeterminate fragment			
377	SW 1/2	383	1	Kitchen	Container Glass	olive bottle fragment			
377	SW 1/2	383	1	Kitchen	Container Glass	olive bottle fragment			
377	SW 1/2	383	1	Kitchen	Container Glass	olive bottle fragment			
377	SW 1/2	383	1	Kitchen	Container Glass	olive indeterminate fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
377	NE 1/2	385	1	Kitchen	Container Glass	light aqua indeterminate fragment			
377	NE 1/2	385	1	Kitchen	Container Glass	olive bottle fragment			
378	S 1/2	388	1	Clothing	Button	corroded and fragmentary			
378	N 1/2	389	2	Activities	Other	ferrous fragments			very small fragments
378	N 1/2	389	1	Architectural	Nail	proximal, cut		1835-1900	
379	Section 1	381	1	Activities	Other	coal			
379	Section 1	381	1	Architectural	Nail	medial, pulled, cut		1815-1900	
379	Section 1	381	1	Clothing	Button	2 piece cuprous/ferrous button with floral motif missing shank	22.49 mm		
379	Section 1	381	1	Kitchen	Container Glass	olive bottle fragment			
379	Section 2	382	1	Activities	Hardware	cuprous threaded eye bolt			
391	N 1/2	410	1	Kitchen	Container Glass	olive indeterminate fragment			
398	S 1/2	391	2	Activities	Sheet Tin/Tinned Iron	tin fragments			
398	S 1/2	391	6	Architectural	Nail	cut		1815-1900	
398	S 1/2	391	1	Architectural	Nail	proximal, cut		1835-1900	
398	S 1/2	391	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
398	S 1/2	391	1	Kitchen	Ceramic	undecorated hotelware indeterminate sherd		lt19th-mid20th	
398	S 1/2	391	1	Kitchen	Container Glass	colorless indeterminate fragment			
398	N 1/2	392	2	Architectural	Nail	indeterminate			
398	N 1/2	392	2	Kitchen	Container Glass	colorless indeterminate fragment			
398	N 1/2	393	13	Architectural	Nail	cut		1815-1900	corroded
400	E 1/2	395	1	Architectural	Nail	medial, cut		1815-1900	
420	NE 1/2	419	1	Architectural	Nail	whole, unaltered, wire	10 p	1900-	
420	SW 1/4	425	1	Activities	Hardware	"U" staple			
425	SE 1/4	400	1	Architectural	Brick	handmade	4.7 g		
425	SE 1/4	400	1	Architectural	Nail	medial, cut		1815-1900	
425	SE 1/4	400	2	Personal	Photo Frames	cuprous tintype frame fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
425	SE 1/4	401	1	Architectural	Brick	handmade	60.1 g		
425	SE 1/4	401	2	Architectural	Nail	medial, cut		1815-1900	
425	SE 1/4	401	1	Architectural	Nail	cut		1815-1900	
425	SE 1/4 ZONE II & III	401	1	Arms	Ammunition	.54 cal Minie ball	0.5395		
425	SE 1/4 Zones II and III	401	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SE 1/4 Zones II and III	401	2	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SE 1/4	401	1	Personal	Photo Frames	cuprous tintype frame fragment			
425	SE 1/4 Z III	402	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
425	SE 1/4 Z III	402	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SE 1/4 Z III	402	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SE 1/4 Z III	402	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SW 1/4 Zone II	422	12	Activities	Sheet Tin/Tinned Iron	tin fragments			
425	SW 1/4	422	1	Architectural	Brick	handmade	8.2 g		
425	SW 1/4	422	1	Architectural	Nail	proximal, cut		1835-1900	
425	SW 1/4 Zone III	423	1	Activities	Other	ferrous tube fragment			
425	SW 1/4 Zone III	424	4	Activities	Crate Band	ferrous crate band fragment			
425	SW 1/4 Zone III	424	12	Activities	Other	ferrous fragment			
425	SW 1/4	424	5	Architectural	Brick	handmade	191.6 g		
425	SW 1/4	424	3	Architectural	Nail	proximal, cut		1835-1900	
425	SW 1/4	424	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
425	SW 1/4	424	1	Clothing	Other Fasteners	ferrous buckle			
425	SW 1/4 Zone III	424	2	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	SW 1/4	424	1	Kitchen	Container Glass	blue/green indeterminate fragment			
425	SW 1/4	424	1	Personal	Combs	vulcanite comb tine			
425	SW 1/4	429	1	Architectural	Brick	handmade	8.4 g		

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
425	SW 1/4	429	1	Architectural	Nail	distal, cut		1815-1900	
425	SW 1/4	429	2	Architectural	Nail	medial, cut		1815-1900	
425	SW 1/4	429	2	Architectural	Nail	proximal, cut		1835-1900	
425	SW 1/4	432	1	Architectural	Nail	proximal, cut		1835-1900	
425	SW 1/4 ZONE VII	432	1	Arms	Ammunition	.54 cal round ball	0.527		
425	SE 1/4 75-78 cmbs	450	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
425	SE 1/4 75-78 cmbs	450	2	Kitchen	Ceramic	alkaline glazed/slip design stoneware indeterminate sherd		1780-1900	
425	SE 1/4	453	3	Architectural	Brick	handmade	251.8 g		
425	SE 1/4	453	2	Architectural	Nail	indeterminate			
425	NE 1/4	455	1	Kitchen	Container Glass	colorless indeterminate fragment			
425	NE 1/4	460	1	Kitchen	Container Glass	olive indeterminate fragment			
425	Zone VI	467	1	Activities	Hardware	ferrous U shaped object			
425	NE 1/4	467	3	Architectural	Brick	handmade	126.9 g		
425	NE 1/4	467	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
425	NE 1/4	467	1	Architectural	Nail	proximal, cut		1835-1900	
425	NE 1/4 ZONE II	467	1	Arms	Ammunition	.54 cal round ball	0.535		
425	NE 1/4	467	1	Clothing	Other Fasteners	copper grommet			
425	NE 1/4 Zone VI	467	3	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	NE 1/4	469	1	Architectural	Nail	medial, cut		1815-1900	
425	NE 1/4	469	1	Architectural	Nail	proximal, cut		1835-1900	
425	NE 1/4	470	2	Architectural	Nail	distal, cut		1815-1900	
425	NE 1/4	470	1	Kitchen	Container Glass	aqua bottle fragment			
425	NE 1/4 Zone VI lower part	476	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
425	NW 1/4 Zone III	480	1	Activities	Sheet Tin/Tinned Iron	ferrous sheet			fragment of a tin or iron sheet-conserved

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
425	NW 1/4 ZONE III	481	1	Activities	Sheet Tin/Tinned Iron	ferrous sheet			large fragment of a tin or iron sheet-conserved
425	NW 1/4 ZONE III-22 cmbs	482	2	Activities	Sheet Tin/Tinned Iron	ferrous sheet			fragments of a tin or iron sheet-conserved
425	NW 1/4	483	1	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	485	1	Architectural	Other	asbestos tile			intrusive
425	NW 1/4	485	1	Architectural	Other	concrete	250.1 g		
425	NW 1/4	485	2	Architectural	Nail	medial, cut		1815-1900	
425	NW 1/4	485	1	Clothing	Other Fasteners	small cuprous buckle			
425	NW 1/4	487	1	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	487	2	Architectural	Nail	medial, cut		1815-1900	
425	NW 1/4	488	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
425	NW 1/4	489	18	Architectural	Brick	handmade	189.3 g		
425	NW 1/4	489	1	Architectural	Nail	distal, cut		1815-1900	
425	NW 1/4	489	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
425	NW 1/4	490	13	Architectural	Brick	handmade	100.9 g		
425	NW 1/4	490	2	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	490	2	Architectural	Nail	medial, cut		1815-1900	
425	NW 1/4	490	1	Architectural	Nail	distal, cut		1815-1900	
425	NW 1/4, Zone 18, 52 cmbs	491	1	Arms	Accoutrements	tin cartridge box			
425	NW 1/4 Zone 5	492	4	Tobacco Pipe	Tobacco Pipe	unglazed fluted redware			
425	NW 1/4 Zone 5	492	1	Tobacco Pipe	Tobacco Pipe	unglazed fluted redware			
425	NW 1/4 Zone 18	493	9	Activities	Sheet Tin/Tinned Iron	tin fragments			
425	NW 1/4	493	6	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	493	5	Architectural	Nail	cut		1815-1900	
425	NW 1/4	493	1	Architectural	Nail	distal, clinched, indeterminate			
425	NW 1/4	494	1	Architectural	Brick	handmade	5 g		
425	NW 1/4	494	1	Architectural	Nail	medial, cut		1815-1900	
425	NW 1/4 Zone 9	494	2	Tobacco Pipe	Tobacco Pipe	unglazed redware			
425	NW 1/4 Zone 18	495	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
425	NW 1/4 Zone 18	495	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	NW 1/4 Zone 18	495	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	NW 1/4 Zone 18	495	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	NW 1/4	496	1	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4 Zone 6	497	32	Activities	Sheet Tin/Tinned Iron	tin fragments			
425	NW 1/4	497	3	Architectural	Brick	handmade	92.3 g		
425	NW 1/4	497	6	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4 Zone 6	497	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
425	NW 1/4 Zone 6	497	5	Tobacco Pipe	Tobacco Pipe	unglazed fluted redware stub stem			
425	NW 1/4 Zone 6	497	1	Tobacco Pipe	Tobacco Pipe	unglazed fluted redware stub stem			
425	NW 1/4 Zone 12	498	1	Activities	Other	metal band			
425	NW 1/4	498	10	Architectural	Brick	handmade	523.6 g		
425	NW 1/4	498	4	Architectural	Nail	medial, cut		1815-1900	
425	NW 1/4	498	2	Architectural	Nail	distal, cut		1815-1900	
425	NW 1/4	498	3	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	499	1	Architectural	Nail	proximal, cut		1835-1900	
425	NW 1/4	499	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
432	NE 1/2	523	1	Architectural	Nail	cut		1815-1900	
434	SW 1/2	417	1	Kitchen	Container Glass	olive bottle fragment			
449	Section 3	446	1	Activities	Other	ferrous fragment			
449	Section 3	446	1	Architectural	Nail	cut		1815-1900	
449	Section 3	446	1	Architectural	Nail	proximal, cut		1835-1900	
449	Section 3	446	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
449	SECTION 3	446	1	Arms	Ammunition	percussion cap			
449	Section 3	446	1	Kitchen	Container Glass	dark aqua bottle fragment			
449	Section 3	446	1	Kitchen	Container Glass	dark aqua panel bottle fragment			
449	Section 3	446	2	Kitchen	Container Glass	olive bottle fragment			
449	Section 3	446	1	Personal	Combs	vulcanite comb tine			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
449	Sect 4	447	1	Personal	Writing Implements	graphite pencil lead			
449	Sect. 4	448	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
449	Section 4	448	5	Kitchen	Container Glass	dark aqua bottle fragment			
449	Section 4	448	2	Kitchen	Container Glass	dark aqua panel bottle fragment			
449	Section 4	448	3	Kitchen	Container Glass	olive bottle fragment			
449	Section 4	448	1	Kitchen	Container Glass	olive bottle fragment			
449	Section 4	448	1	Personal	Combs	vulcanite comb tine			
450	E 1/2 Zone II	439	1	Activities	Other	ferrous wire fragment			
452	Surface	434	1	Kitchen	Container Glass	light aqua bottle fragment			
452	Surface	434	1	Kitchen	Container Glass	light aqua bottle fragment			
452	Surface	434	1	Kitchen	Container Glass	light aqua bottle fragment			
455	Sect II	451	3	Kitchen	Container Glass	olive indeterminate fragment			
455	Sect I	456	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
455	Section I	456	1	Kitchen	Container Glass	amber/olive indeterminate fragment			
455	Section II	457	2	Architectural	Nail	medial, cut		1815-1900	
455	Section II	457	2	Architectural	Nail	proximal, cut		1835-1900	
455	Sect II	457	4	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
455	Section II	457	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
455	Section II	457	1	Kitchen	Container Glass	olive indeterminate fragment			
455	Section III	458	1	Architectural	Nail	proximal, cut		1835-1900	
455	Sect III	458	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
458	Section 1	471	1	Architectural	Brick	handmade	3.5 g		
458	Section 1	471	2	Architectural	Nail	proximal, cut		1835-1900	
458	Section 2	472	1	Activities	Other	granite			
458	Section 2	472	1	Architectural	Nail	cut		1815-1900	corroded
458	Section 2	472	1	Kitchen	Container Glass	amber indeterminate fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
458	Sect 3	473	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
458	Section 4	475	1	Architectural	Nail	proximal, cut		1835-1900	
458	Section 4	475	3	Architectural	Nail	medial, cut		1815-1900	
458	Sect 4	475	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
458	Section 4	475	2	Kitchen	Container Glass	colorless indeterminate fragment			
458	Section 4	475	1	Kitchen	Container Glass	dark olive indeterminate fragment			
459	N 1/2	464	2	Architectural	Nail	proximal, cut		1835-1900	
459	N 1/2	464	1	Architectural	Nail	cut		1815-1900	
466	North Profile	500	1	Kitchen	Container Glass	light aqua indeterminate fragment			
466	North Profile	500	1	Kitchen	Container Glass	olive bottle fragment			
466	North Profile	500	10	Kitchen	Container Glass	olive bottle fragment			
466	N 1/2	501	1	Kitchen	Container Glass	light aqua bottle fragment			
466	N 1/2	501	1	Kitchen	Container Glass	light aqua bottle fragment			
466	N 1/2	501	1	Kitchen	Container Glass	light aqua bottle fragment			
466	N 1/2	501	2	Kitchen	Container Glass	light aqua indeterminate fragment			
466	N 1/2	501	2	Kitchen	Container Glass	light aqua indeterminate fragment			
466	N 1/2	501	5	Kitchen	Container Glass	olive bottle fragment			
466	N 1/2	501	17	Kitchen	Container Glass	olive bottle fragment			
466	N 1/2	501	11	Kitchen	Container Glass	olive bottle fragment			
466	N 1/2	502	204	Kitchen	Container Glass	olive indeterminate fragment			
466	N 1/2	502	3	Kitchen	Container Glass	aqua indeterminate fragment			
466	N 1/2	502	4	Kitchen	Container Glass	aqua indeterminate fragment			
466	N 1/2	502	13	Kitchen	Container Glass	olive indeterminate fragment			
468	SW 1/2	503	1	Architectural	Nail	cut		1815-1900	very heavily corroded

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
468	N E 1/2	504	1	Kitchen	Container Glass	olive indeterminate fragment			
471	N 1/2	513	1	Activities	Other	cinder			
471	N 1/2	513	1	Kitchen	Container Glass	olive bottle fragment			
479	SW 1/4	527	1	Kitchen	Ceramic	plain colonoware bowl sherd		lt 18th- mid19th	
479	SE 1/4	528	3	Architectural	Brick	handmade	25 g		
479	SE 1/4	528	1	Kitchen	Container Glass	opaque olive bottle fragment			
479	SE 1/4	528	4	Kitchen	Container Glass	opaque olive bottle fragment			
479	SE 1/4	528	2	Kitchen	Container Glass	opaque olive bottle fragment			
479	SE 1/4	528	2	Kitchen	Container Glass	opaque olive bottle fragment			
479	NW 1/4	530	2	Kitchen	Container Glass	dark olive bottle fragment			
479	NW 1/4	530	1	Kitchen	Container Glass	dark olive bottle fragment			
479	NE 1/4	532	1	Architectural	Nail	proximal, cut		1835-1900	
479	NE 1/4	532	2	Kitchen	Container Glass	opaque olive bottle fragment			
479	NE 1/4	532	1	Kitchen	Container Glass	opaque olive bottle fragment			
479	NE 1/4	532	1	Kitchen	Container Glass	opaque olive bottle fragment			
479	NE 1/4	532	1	Kitchen	Container Glass	opaque olive bottle fragment			
484	E 1/2	536	1	Architectural	Nail	medial, unaltered, cut		1815-1900	
484	W 1/2	547	1	Kitchen	Container Glass	olive bottle fragment			
485	Section 2	539	1	Activities	Crate Band	ferrous band			
485	Section 2	539	1	arms	Accoutrements	possible canteen spout			
485	Section 4	548	1	Kitchen	Kitchenware	tin can			
485	Section 6	553	1	Architectural	Nail	proximal, cut		1835-1900	
486	E 1/2	533	1	Architectural	Nail	distal, cut		1815-1900	
486	E 1/2	533	1	Architectural	Nail	proximal, cut		1835-1900	
486	E 1/2	533	1	Architectural	Nail	proximal, pulled, cut		1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
486	S Section	541	15	Activities	Sheet Tin/Tinned Iron	tin fragments			
493	NW 1/4	708	1	Kitchen	Container Glass	olive indeterminate fragment			
493	NW 1/4	708	1	Personal	Photo Frames	cuprous tintype frame			
493	N 1/2	709	1	Architectural	Brick	handmade	1296 g		
493	440-535 cmbs	730	4	Kitchen	Container Glass	olive bottle fragment			
493	440-535 cmbs	730	1	Kitchen	Container Glass	olive bottle fragment			
493	535-605 cmbs	731	1	Architectural	Brick	handmade	191.5 g		
493	535-605 cmbs	731	1	Architectural	Brick	handmade	452.2 g		
493	535-605 cmbs	731	1	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
493	535-605 cmbs	731	1	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
493	535-605 cmbs	731	2	Kitchen	Ceramic	blue transfer print cc ware plate sherd		1830-1860	
493	535-605 cmbs	732	1	Activities	Wagon/Machine Parts	ferrous handle			poss. Wagon part-conserved
493	497 cmbs	733	1	Architectural	Brick	handmade	723 g		
502	S 1/2	600	1	Kitchen	Container Glass	colorless indeterminate fragment			
502	NW 1/4	608	1	Architectural	Nail	proximal, cut		1835-1900	
502	NW 1/4	608	1	Architectural	Nail	distal, cut		1815-1900	
502	S 1/2	609	2	Architectural	Brick	handmade	278.9 g		
502	S 1/2	609	3	Architectural	Nail	proximal, cut		1835-1900	
502	S 1/2	609	2	Architectural	Nail	proximal, pulled, cut		1835-1900	
502	S 1/2	609	1	Architectural	Nail	proximal, cut		1835-1900	L head
502	S 1/2	609	1	Architectural	Nail	medial, cut		1815-1900	
502	S 1/2 Z I	609	2	Kitchen	Ceramic	annular cc ware holloware sherd		1830-1870	
502	S 1/2 Z I	609	1	Kitchen	Ceramic	annular cc ware holloware sherd		1830-1870	
502	S 1/2 Z I	609	2	Kitchen	Ceramic	undecorated cc ware holloware sherd		1830-	
502	S 1/2 Z I	609	1	Kitchen	Ceramic	undecorated cc ware holloware sherd		1830-	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
502	S 1/2	609	2	Kitchen	Container Glass	colorless indeterminate fragment			
502	S 1/2	609	1	Kitchen	Container Glass	light aqua indeterminate fragment			
502	S 1/2	609	1	Kitchen	Container Glass	olive bottle fragment			
502	S 1/2	609	2	Kitchen	Container Glass	olive indeterminate fragment			
502	S 1/2 Zone I	609	2	Tobacco Pipe	Tobacco Pipe	unglazed redware			
502	S 1/2 Zone II	610	1	Activities	Other	large square ferrous band			
502	S 1/2	610	1	Architectural	Brick	handmade	63.2 g		
502	S 1/2	610	2	Architectural	Nail	proximal, cut		1835-1900	
502	S 1/2	610	1	Architectural	Nail	medial, cut		1815-1900	
502	S 1/2	610	1	Clothing	Other Fasteners	ferrous buckle			
502	S 1/2 Z II	610	1	Kitchen	Ceramic	annular cc ware holloware sherd		1830-1870	
502	S 1/2 Z II	610	1	Kitchen	Ceramic	undecorated cc ware holloware sherd		1830-1870	
502	S 1/2	610	1	Kitchen	Container Glass	aqua bottle fragment			
502	S 1/2	610	3	Kitchen	Container Glass	blue/green indeterminate fragment			
502	S 1/2	610	1	Kitchen	Container Glass	olive indeterminate fragment			
502	NE 1/4	611	1	Architectural	Brick	handmade	279.8 g		
502	NE 1/4	611	1	Architectural	Nail	proximal, cut		1835-1900	
502	NE 1/4 Zone II	611	1	Kitchen	Ceramic	undecorated cc ware holloware sherd		1830-1860	
502	NE 1/4	611	1	Kitchen	Container Glass	olive indeterminate fragment			
502	NE 1/4	612	1	Architectural	Brick	handmade	10.8 g		
502	NE 1/4	612	1	Architectural	Nail	proximal, cut		1835-1900	
502	NE 1/4 ZONE I	612	1	Arms	Ammunition	shotgun shell		1867-1911	brass shotshell base
502	NE 1/4 Zone I	612	1	Kitchen	Ceramic	annular cc ware holloware sherd		1830-1870	
502	NE 1/4 Zone I	612	1	Kitchen	Ceramic	annular cc ware london style cup sherd		1830-1860	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
502	NE 1/4	612	1	Kitchen	Container Glass	blue/green indeterminate fragment			
502	S 1/2	614	1	Kitchen	Container Glass	olive bottle fragment			
502	N 1/2 Zone 3A	619	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
502	S 1/2	629	1	Architectural	Brick	handmade	206 g		
502	N 1/2	631	1	Architectural	Nail	proximal, cut		1835-1900	
502	N 1/2	631	2	Kitchen	Container Glass	light blue/green indeterminate fragment			
502	S 1/2	632	1	Kitchen	Container Glass	olive indeterminate fragment			
502	N 1/2, S 1/2	698	24	Architectural	Nail	cut		1815-1900	very corroded
502	N 1/2	699	1	Activities	Wagon/Machine Parts	large ferrous hook			conserved
502	N 1/2	699	3	Architectural	Nail	cut		1815-1900	
502	N 1/2 420-470 cmbs	699	1	Kitchen	Ceramic	alkaline glazed/slip design stoneware indeterminate sherd		1780-1900	
502	N 1/2	700	3	Architectural	Nail	indeterminate			heavily corroded
502	S 1/2	701	2	Architectural	Nail	cut		1815-1900	corroded
502	N 1/2	703	1	Kitchen	Container Glass	blue/green indeterminate fragment			
502	S 1/2 510-570 cmbs	704	4	Activities	Crate Band	ferrous crate band fragment			very highly corroded
502	S 1/2 510-570 cmbs	704	5	Activities	Other	ferrous fragments			very highly corroded
502	S 1/2 510-570 cmbs	704	1	Activities	Other	ferrous fragments			very highly corroded; possibly two nails
502	S 1/2 510-570 cmbs	704	1	Activities	Sheet Tin/Tinned Iron	tin fragments			very highly corroded
502	S 1/2	704	127	Architectural	Nail	cut		1815-1900	very corroded
502	S 1/2 510-570 cmbs	704	1	Kitchen	Ceramic	alkaline glazed/floral slip stoneware jug sherd		1780-1900	
502	570-588 cmbs	705	3	Activities	Other	ferrous object			very highly corroded

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
502	All	705	53	Architectural	Nail	cut		1815-1900	very corroded
502	All	705	2	Architectural	Nail	cut		1815-1900	
502	588 cmbs	705	1	arms	Accoutrements	complete drum canteen			
502	588 cmbs	705	7	arms	Accoutrements	copper fragments			possible canteen bands
502	588 cmbs	705	10	arms	Accoutrements	copper fragments with cuprous rivets			possible canteen bands
502	587 cmbs	705	1	Kitchen	Ceramic	alkaline glazed stoneware crock sherd		1780-1900	
502	587 cmbs	705	1	Kitchen	Ceramic	bristol glazed stoneware ginger beer bottle sherd		1830-1900	
502	587 cmbs	705	1	Kitchen	Container Glass	dark olive bottle fragment			
502	587 cmbs	705	1	Kitchen	Container Glass	dark olive bottle fragment			
502	587 cmbs	705	1	Kitchen	Container Glass	olive bottle fragment			
502	N 1/2 & S 1/2	705	2	Kitchen	Container Glass	olive indeterminate fragment			
502	N 1/2 510-570 cmbs	706	4	Activities	Other	ferrous objects			very highly corroded
502	N 1/2	706	33	Architectural	Nail	cut		1815-1900	very corroded
502	N 1/2 510-570 cmbs	706	1	Arms	Accoutrements	cuprous finial with preserved wood			
502	N 1/2	706	1	Kitchen	Container Glass	dark olive bottle fragment			
502	Bottle area ~587 cmbs	707	2	Activities	Other	ferrous fragments			possibly nails
502	Bottle area ~587 cmbs	707	1	Activities	Other	ferrous fragments			
507	N 1/2	653	1	Arms	Ammunition	percussion cap			
513	Post 3 S 1/2	654	1	Activities	Crate Band	ferrous crate band fragment			
513	Post 3 S/12	654	1	Kitchen	Container Glass	olive bottle fragment			
513	N 1/2	655	1	Architectural	Nail	proximal, cut		1835-1900	
513	Post 3 N 1/2	655	2	Kitchen	Container Glass	olive bottle fragment			
514	S 1/2	738	1	Architectural	Brick	handmade	9.4 g		
514	S 1/2	738	4	Architectural	Nail	medial, cut		1815-1900	
514	S 1/2	738	4	Architectural	Nail	whole, unaltered, cut	8 p	1835-1900	
514	S 1/2	738	7	Architectural	Nail	proximal, cut		1835-1900	
514	S 1/2	738	3	Architectural	Nail	distal, cut		1815-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
514	S 1/2 ZONE 1	738	1	Arms	Other Weapons	bayonet			tip only
514	S 1/2	739	1	Architectural	Brick	handmade	175.6 g		
514	S 1/2	740	4	Architectural	Brick	handmade	60.9 g		
514	N 1/2	742	1	Activities	Other	coal			
514	N 1/2	742	1	Architectural	Brick	handmade	5.1 g		
514	N 1/2	742	5	Architectural	Nail	proximal, cut		1835-1900	
514	N 1/2	742	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
514	N 1/2	742	1	Architectural	Nail	medial, pulled, cut		1815-1900	
514	N 1/2	743	1	Architectural	Brick	handmade	33.1 g		
514	N 1/2 Zone 3	747	1	Tobacco Pipe	Tobacco Pipe	unglazed redware			
514	0	774	1	Architectural	Nail	medial, cut		1815-1900	
517	SW 1/2	664	1	Architectural	Nail	proximal, cut		1835-1900	
518	E 1/4	569	2	Architectural	Nail	medial, cut		1815-1900	
518	E 1/4	569	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1850	
518	E 1/4	569	3	Kitchen	Container Glass	olive indeterminate fragment			
518	S 1/4	582	2	Architectural	Nail	proximal, cut		1835-1900	
518	S 1/4	583	1	Kitchen	Container Glass	olive indeterminate fragment			
518	S 1/4	584	1	Kitchen	Container Glass	olive indeterminate fragment			
518	NW 1/2	595	1	Kitchen	Container Glass	colorless indeterminate fragment			
518	NW 1/2	596	2	Architectural	Brick	handmade	23.6 g		
518	NW 1/2	596	2	Architectural	Nail	proximal, cut		1835-1900	
518	NW 1/2	596	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
518	NW 1/2 ZONES A,B,C	596	1	Arms	Ammunition	.31 cal round shot	0.3165		
518	NW 1/2 Zones A, B, C	596	4	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1850	
518	NW 1/2	596	2	Kitchen	Container Glass	colorless indeterminate fragment			
518	NW 1/2	596	1	Kitchen	Container Glass	olive bottle fragment			
518	NW 1/2	596	5	Kitchen	Container Glass	olive indeterminate fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	NW 1/2	607	1	Architectural	Nail	proximal, cut		1835-1900	
518	NW 1/2	607	1	Architectural	Nail	distal, cut		1815-1900	
518	NW 1/2	607	1	Architectural	Nail	whole, pulled, cut	8 p	1835-1900	
518	NW 1/2 G, H, J	607	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-	
518	NW 1/2	607	8	Kitchen	Container Glass	olive indeterminate fragment			
518	NW 1/2	625	1	Architectural	Nail	proximal, cut		1835-1900	
518	NW 1/2	625	5	Kitchen	Container Glass	olive indeterminate fragment			
518	Part II SE 1/2	626	1	Activities	Hardware	railroad spike			
518	Part II SE 1/2	626	1	Clothing	Other Fasteners	ferrous buckle			
518	Part II SE 1/2	626	5	Kitchen	Container Glass	olive bottle fragment			
518	Part II SE 1/2	626	1	Personal	Currency	Indian head penny		1860-1864	
518	Part II NW 1/2	627	1	Architectural	Nail	whole, unaltered, cut	5 p	1835-1900	
518	Part II NW 1/2	627	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
518	Part II NW 1/2	627	1	Architectural	Nail	whole, cut	4 p	1835-1900	
518	Part II NW 1/2 140-235 cmbnd	627	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1850	
518	Part II NW 1/2	627	3	Kitchen	Container Glass	olive indeterminate fragment			
518	SE 1/2 240-340 cmbs	645	8	Activities	Sheet Tin/Tinned Iron	tin fragments			
518	SE 1/2	645	1	Architectural	Brick	handmade	185.5 g		
518	SE 1/2	645	1	Architectural	Nail	indeterminate			nail?
518	SE 1/2 240-340 cmbs	645	1	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1850-1870	
518	SE 1/2 240-340 cmbs	645	1	Kitchen	Ceramic	undecorated cc ware indeterminate sherd		1830-	
518	SE 1/2	645	1	Kitchen	Container Glass	dark olive bottle fragment			
518	SE 1/2	645	2	Kitchen	Container Glass	olive indeterminate fragment			
518	340-400 cmbs	646	2	Kitchen	Container Glass	light olive indeterminate fragment			
518	340-400 cmbs	646	1	Kitchen	Container Glass	olive bottle fragment			
518	All	647	3	Architectural	Nail	cut		1815-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	All	647	1	Architectural	Nail	pulled, cut		1815-1900	
518	NW 1/2	648	1	Architectural	Brick	handmade	782 g		
518	NW 1/2	648	1	Architectural	Brick	handmade	78.6 g		
518	NW 1/2 Zone P	648	1	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1850-1870	
518	NW 1/2	648	5	Kitchen	Container Glass	olive indeterminate fragment			
518	SE 1/2 & NW 1/2 340-400 cmbs	650	6	Activities	Other	metal fragments			very highly corroded
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Activities	Tools	poss. ferrous shovel blade			very highly corroded-too deteriorated for electrolysis or stabilization
518	SE 1/2 & NW 1/2 340-400 cmbs	650	2	Architectural	Brick	handmade	173.6 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Architectural	Brick	handmade	399.3 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Architectural	Brick	handmade	403.3 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Architectural	Brick	handmade	527.3 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Architectural	Brick	handmade	477.3 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Architectural	Brick	handmade	690 g		
518	SE 1/2 & NW 1/2 340-400 cmbs	650	1	Kitchen	Kitchenware	spider skillet fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	N 1/2 0-50 cmbnd	667	5	Architectural	Nail	cut		1815-1900	heavily corroded
518	N 1/2 0-50 cmbnd	667	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
518	N 1/2 0-50 cmbnd	667	1	Kitchen	Ceramic	brown slip stoneware master ink sherd			
518	N 1/2 0-50 cmbnd	667	1	Kitchen	Ceramic	brown slip stoneware master ink sherd			
518	N 1/2 0-50 cmbnd	668	1	Architectural	Brick	handmade	139.8 g		
518	N 1/2 0-50 cmbnd	668	1	Architectural	Brick	handmade	636.8 g		
518	N 1/2 0-50 cmbnd	668	1	Architectural	Brick	handmade	370.8 g		
518	N 1/2 0-50 cmbnd	668	1	Architectural	Brick	handmade	703 g		
518	N 1/2 0-50 cmbnd	668	1	Architectural	Brick	handmade	806 g		
518	S 1/2 50-100CM BELOW NEW DATUM	669	1	Arms	Other Weapons	bayonet			75%
518	S1/2 50-100 cmnd	669	1	Arms	Other Weapons	bayonet			50%
518	N1/2 50-100 cmnd	670	1	Arms	Other Weapons	bayonet			partial socket
518	NW 1/2	671	108	Architectural	Nail	cut		1815-1900	very corroded
518	N 1/2	671	1	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	672	65	Architectural	Nail	cut		1815-1900	very rusted
518	S 1/2	672	4	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	672	1	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	673	23	Architectural	Nail	cut		1815-1900	
518	S 1/2 0-50CM BELOW NEW DATUM	673	1	Arms	Ammunition	.36 cal. conical bullet	0.3205		

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	S 1/2 0-50CM BELOW NEW DATUM	673	1	Arms	Ammunition	.36 cal. conical bullet	0.323		
518	N 1/2	692	71	Architectural	Nail	cut		1815-1900	very corroded
518	N 1/2	692	1	Kitchen	Container Glass	colorless bottle fragment			
518	N 1/2	692	1	Kitchen	Container Glass	colorless indeterminate fragment			
518	N 1/2	692	3	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2	692	1	Kitchen	Container Glass	olive indeterminate fragment			
518	N 1/2	692	1	Kitchen	Container Glass	olive indeterminate fragment			
518	S 1/2	694	112	Architectural	Nail	cut		1815-1900	very corroded
518	S 1/2	694	9	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	694	1	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	694	4	Kitchen	Container Glass	olive bottle fragment			
518	S 1/2	694	17	Kitchen	Container Glass	olive indeterminate fragment			
518	S 1/2	694	1	Kitchen	Container Glass	olive indeterminate fragment			
518	S 1/2	695	1	Activities	Tools	ferrous shovel blade			very highly corroded
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Activities	Other	ferrous cylinder			very highly corroded
518	N 1/2 & S 1/2 150-230 cmbnd	697	9	Architectural	Nail	cut		1815-1900	corroded
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Arms	Other Weapons	bayonet			complete socket
518	N 1/2 & S 1/2 150-230 cmbnd	697	2	arms	Other Weapons	bayonet fragments			very highly corroded
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	19	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	5	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	2	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	2	Kitchen	Ceramic	bristol glazed stoneware ginger beer bottle sherd		1830-1900	
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	aqua indeterminate fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	2	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	5	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	17	Kitchen	Container Glass	olive bottle fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	1	Kitchen	Container Glass	olive bottle fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	4	Kitchen	Container Glass	olive indeterminate fragment			
518	N 1/2 & S 1/2 150-230 cmbnd	697	23	Kitchen	Container Glass	olive indeterminate fragment			
525	Section I	574	1	Architectural	Nail	proximal, cut		1835-1900	
525	Section I	574	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
525	Section I	574	1	Architectural	Nail	medial, cut		1815-1900	
525	Section I	574	1	Architectural	Nail	medial, pulled, cut		1815-1900	
525	Section II	586	2	Architectural	Nail	proximal, cut		1835-1900	
525	Section II	586	3	Architectural	Nail	cut		1815-1900	
525	Section II	586	1	Kitchen	Container Glass	aqua bottle fragment			
525	Section II	586	1	Kitchen	Container Glass	colorless indeterminate fragment			
525	Section II	586	2	Kitchen	Container Glass	light blue/green bottle fragment			
527	Section I	558	1	Architectural	Brick	handmade	49.2 g		
527	Section I	558	1	Architectural	Brick	handmade	44.6 g		
527	Section I	558	1	Kitchen	Container Glass	light blue/green indeterminate fragment			
527	Section II	559	1	Kitchen	Container Glass	amethyst indeterminate fragment		1880-1915	
527	Section II	559	3	Kitchen	Container Glass	olive bottle fragment			
527	Section III	563	1	Kitchen	Ceramic	undecorated refined earthenware indeterminate sherd			
527	Section III	564	1	Architectural	Nail	proximal, cut		1835-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
527	Section III	564	4	Architectural	Nail	medial, cut		1815-1900	
527	Sect III	564	1	Clothing	Other Fasteners	ferrous snap half			
527	Sect III	564	9	Kitchen	Ceramic	dodecagon paneled ironstone plate sherd		1845-1865	
527	Sect III	564	1	Kitchen	Ceramic	dodecagon paneled ironstone plate sherd		1845-1865	
527	Sect III	564	1	Kitchen	Ceramic	dodecagon paneled ironstone plate sherd		1845-1865	
527	Sect III	564	11	Kitchen	Ceramic	dodecagon paneled ironstone plate sherd		1845-1865	
527	Section III	564	1	Kitchen	Container Glass	light aqua bottle fragment			
527	Section III	564	14	Kitchen	Container Glass	light aqua bottle fragment			
527	Section III	564	1	Kitchen	Container Glass	light aqua bottle fragment			
527	Section III	564	1	Kitchen	Container Glass	light aqua bottle fragment			
527	Section III	564	3	Kitchen	Container Glass	light aqua bottle fragment			
527	Section III	564	4	Kitchen	Container Glass	light aqua indeterminate fragment			
527	Section III	564	8	Kitchen	Container Glass	light blue/green indeterminate fragment			
532	E 1/2	674	9	Architectural	Nail	proximal, cut		1835-1900	
532	E 1/2	674	13	Architectural	Nail	cut		1815-1900	
532	E 1/2, Zones 1, 2	674	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
532	E 1/2, Zones 1, 2	674	1	Kitchen	Ceramic	salt glazed/slip interior stoneware indeterminate sherds		1780-1900	
532	E 1/2	674	1	Kitchen	Container Glass	dark blue/green bottle fragment			
532	E 1/2	674	1	Kitchen	Container Glass	light blue/green bottle fragment			
532	E 1/2	674	1	Personal	Jewelry	vulcanite finger ring			
532	E 1/2	675	3	Architectural	Nail	medial, cut		1815-1900	
532	E 1/2	675	7	Architectural	Nail	proximal, cut		1835-1900	
532	E 1/2	675	1	Kitchen	Container Glass	amber indeterminate fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
532	E 1/2	675	5	Kitchen	Container Glass	amber indeterminate fragment			
532	E 1/2	675	7	Kitchen	Container Glass	dark blue/green indeterminate fragment			
532	E 1/2	675	1	Kitchen	Container Glass	dark blue/green indeterminate fragment			
532	E 1/2	675	2	Kitchen	Container Glass	light blue/green indeterminate fragment			
532	E 1/2	675	2	Personal	Combs	vulcanite comb tine			
532	E 1/2	676	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
532	E 1/2	677	1	Architectural	Brick	handmade	6.4 g		
532	E 1/2	677	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
532	E 1/2	677	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
532	E 1/2 Zone 5	678	1	Activities	Sheet Tin/Tinned Iron	tin fragments			
532	E 1/2	678	11	Architectural	Nail	medial, cut		1815-1900	
532	E 1/2	678	2	Architectural	Nail	cut		1815-1900	
532	E 1/2	678	23	Architectural	Nail	proximal, cut		1835-1900	
532	E 1/2	678	12	Architectural	Nail	distal, cut		1815-1900	
532	E 1/2	678	2	Architectural	Nail	distal, pulled, cut		1815-1900	
532	E 1/2	678	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
532	E 1/2	678	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
532	E 1/2	678	1	Architectural	Nail	whole, pulled, cut	12 p	1835-1900	
532	E 1/2	678	1	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	
532	E 1/2	678	1	Architectural	Nail	whole, clinched, cut	7 p	1835-1900	
532	E 1/2	678	1	Kitchen	Container Glass	indeterminate indeterminate fragment			
532	E 1/2	678	1	Personal	Combs	vulcanite comb tine			
532	E 1/2	678	1	Personal	Combs	vulcanite comb tine			
532	W 1/2	681	3	Architectural	Nail	proximal, cut		1835-1900	
532	W 1/2	681	6	Architectural	Nail	medial, cut		1815-1900	
532	W 1/2	681	1	Kitchen	Container Glass	amber indeterminate fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
532	W 1/2	681	3	Kitchen	Container Glass	amber/olive indeterminate fragment			
532	W 1/2	681	2	Kitchen	Container Glass	colorless indeterminate fragment			
532	W 1/2	681	1	Kitchen	Container Glass	dark blue/green bottle fragment			
532	W 1/2	681	1	Kitchen	Container Glass	dark blue/green indeterminate fragment			
532	W 1/2	685	1	Kitchen	Container Glass	olive bottle fragment			
532	W 1/2 Zone 4	686	10	Activities	Sheet Tin/Tinned Iron	tin fragments			
532	W 1/2	686	1	Architectural	Nail	medial, cut		1815-1900	
532	W 1/2	686	1	Kitchen	Container Glass	light amber/olive bottle fragment			
532	W 1/2	686	45	Kitchen	Container Glass	light blue/green bottle fragment			
532	W 1/2	686	1	Kitchen	Container Glass	light blue/green bottle fragment			
532	W 1/2	686	5	Kitchen	Container Glass	light blue/green bottle fragment			
532	W 1/2	687	1	Architectural	Nail	proximal, cut		1835-1900	
532	W 1/2	688	1	Personal	Combs	vulcanite comb tine			
532	W 1/2	689	1	Architectural	Nail	cut		1815-1900	
532	W 1/2	689	1	Architectural	Nail	indeterminate			
532	W 1/2	689	1	Kitchen	Container Glass	amber indeterminate fragment			
532	W 1/2 Zone 3	689	1	Personal	Combs	vulcanite comb fragment			
532	W 1/2	689	4	Personal	Combs	vulcanite comb tine			
532	W 1/2	690	1	Architectural	Nail	medial, cut		1815-1900	
532	W 1/2	690	4	Personal	Combs	vulcanite comb tine			
532	W 1/2	691	1	Architectural	Nail	distal, cut		1815-1900	
532	W 1/2	691	1	Personal	Combs	vulcanite comb tine			
534	N 1/2	696	1	Architectural	Nail	cut		1815-1900	corroded
534	N 1/2	696	1	Kitchen	Container Glass	aqua indeterminate fragment			
534	N 1/2	696	1	Kitchen	Container Glass	light amber bottle fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
534	N 1/2	696	1	Kitchen	Container Glass	light amber bottle fragment			
534	N 1/2	696	1	Personal	Combs	vulcanite comb tine			
535	N 1/2 Zone I	658	1	Activities	Hardware	ferrous ring			
535	N 1/2	658	49	Architectural	Nail	cut		1815-1900	
535	N 1/2	658	34	Architectural	Nail	proximal, cut		1835-1900	
535	N 1/2	658	3	Architectural	Nail	proximal, clinched, indeterminate			
535	N 1/2	658	1	Clothing	Other Fasteners	ferrous buckle fragment			
535	N 1/2	659	4	Architectural	Nail	proximal, cut		1835-1900	
535	N 1/2	659	3	Architectural	Nail	cut		1815-1900	
535	N 1/2	659	2	Architectural	Nail	proximal, pulled, indeterminate			
535	S 1/2	660	2	Architectural	Brick	handmade	328 g		
535	S 1/2	660	1	Architectural	Nail	whole, unaltered, cut	8 p	1835-1900	
535	S 1/2	660	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
535	S 1/2	660	5	Architectural	Nail	proximal, cut		1835-1900	
535	S 1/2	660	3	Architectural	Nail	cut		1815-1900	
535	S 1/2 Zone I	662	4	Activities	Other	ferrous fragments			very small fragments
535	S 1/2	662	1	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	
535	S 1/2	662	1	Architectural	Nail	proximal, cut		1835-1900	
535	S 1/2 ZONE II-HEAVY FRACTION	663	1	Arms	Ammunition	possible shot			
535	S 1/2 ZONE II-HEAVY FRACTION	663	1	Arms	Ammunition	possible shot			
535	S 1/2	666	8	Architectural	Nail	cut		1815-1900	
535	S 1/2	666	1	Architectural	Nail	distal, clinched, cut		1815-1900	
535	S 1/2	666	7	Architectural	Nail	distal, cut		1815-1900	
535	S 1/2	666	31	Architectural	Nail	proximal, cut		1835-1900	
535	S 1/2	666	3	Architectural	Nail	proximal, clinched, cut		1835-1900	
535	S 1/2	666	10	Architectural	Nail	cut		1815-1900	
535	S 1/2	666	17	Architectural	Nail	proximal, cut		1835-1900	
535	S 1/2	666	6	Architectural	Nail	whole, unaltered, cut	6 p	1835-1900	
535	S 1/2	666	4	Architectural	Nail	whole, unaltered, cut	7 p	1835-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
535	S 1/2	666	1	arms	Accoutrements	cuprous bugle insignia			right facing, Infantry officer?
535	S 1/2	666	1	Clothing	Inisgnia	cuprous bugle insignia			
535	S 1/2 Zone I	666	1	Kitchen	Ceramic	salt glazed stoneware indeterminate sherd		1780-1900	
538	N 1/2	573	1	Architectural	Nail	proximal, cut		1835-1900	
539	S 1/2	555	1	Kitchen	Container Glass	olive indeterminate fragment			
539	S 1/2	556	3	Architectural	Nail	medial, cut		1815-1900	
539	S 1/2	556	6	Architectural	Nail	proximal, cut		1835-1900	
539	S 1/2	556	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
539	S 1/2	556	1	Architectural	Nail	whole, pulled, cut	10 p	1835-1900	
539	S 1/2	556	2	Architectural	Nail	whole, unaltered, cut	16 p	1835-1900	
539	S 1/2	556	3	Arms	Other	lead			
539	S 1/2 Zone II	556	1	Kitchen	Ceramic	red transfer print cc ware plate sherd		1830-1860	
539	S 1/2 Zone II	556	1	Kitchen	Ceramic	red transfer print cc ware plate sherd		1830-1860	
539	S 1/2 Zone II	556	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
539	N 1/2	557	2	Architectural	Nail	proximal, cut		1835-1900	
539	N 1/2	557	1	Architectural	Nail	whole, unaltered, cut	16 p	1835-1900	
539	N 1/2	557	2	Kitchen	Container Glass	olive indeterminate fragment			
539	N 1/2	561	1	Architectural	Nail	proximal, cut		1835-1900	
539	N 1/2	561	1	Architectural	Nail	medial, cut		1815-1900	
540	SE 1/4	575	2	Architectural	Window Glass	blue/green	1.5 mm, 1.86 mm		
540	SE 1/4	575	1	Architectural	Nail	whole, pulled, cut	7 p	1835-1900	
540	SE 1/4	575	1	Architectural	Nail	whole, unaltered, cut	8 p	1835-1900	
540	SE 1/4	575	16	Architectural	Nail	proximal, cut		1835-1900	
540	SE 1/4	575	1	Architectural	Nail	distal, cut		1815-1900	
540	SE 1/4	575	4	Architectural	Nail	cut		1815-1900	
540	SE 1/4 Z 1	575	2	Arms	Other	sheet lead			
540	SE 1/4	575	1	Clothing	Button	4 piece brass Eagle	14.45 mm		
540	SE 1/4	575	1	Kitchen	Container Glass	light blue/green bottle fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
540	SE 1/4	575	1	Kitchen	Container Glass	light blue/green indeterminate fragment			
540	SE 1/4	575	1	Kitchen	Container Glass	olive bottle fragment			
540	SE 1/4	575	1	Kitchen	Container Glass	olive indeterminate fragment			
540	SE 1/4	575	1	Personal	Combs	vulcanite comb tine			
540	SE 1/4	575	1	Personal	Jewelry	vulcanite finger ring			
540	SE 1/4	576	2	Architectural	Brick	handmade	209.5 g		
540	SE 1/4	576	1	Architectural	Brick	handmade	269.6 g		
540	SE 1/4 Zones 2, 3	577	1	Activities	Crate Band	ferrous crate band fragment			
540	SE 1/4 Zones 2, 3	577	1	Activities	Other	ferrous metal fragment			
540	SE 1/4 Zones 2, 3	577	28	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SE 1/4 Zones 2, 3	577	24	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SE 1/4	577	3	Architectural	Brick	handmade	21.4 g		
540	SE 1/4	577	2	Architectural	Window Glass	blue/green	1.79 mm, 1.8 mm		
540	SE 1/4	577	2	Architectural	Nail	proximal, cut		1835-1900	
540	SE 1/4	577	14	Architectural	Nail	cut		1815-1900	
540	SE 1/4 Z2 AND 3	577	1	Kitchen	Ceramic	red transfer print cc ware plate sherd		1830-1850	
540	SE 1/4 Z2 AND 3	577	1	Kitchen	Ceramic	undecorated cc ware plate sherd		1830-1860	
540	SE 1/4 Z2 AND 3	577	2	Kitchen	Ceramic	slip glazed stoneware indeterminate sherd			
540	SE 1/4 Z2 AND 3	577	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd			
540	SE 1/4	577	2	Kitchen	Container Glass	colorless indeterminate fragment			
540	SE 1/4	577	2	Kitchen	Container Glass	light aqua bottle fragment			
540	SE 1/4	577	1	Kitchen	Container Glass	light aqua indeterminate fragment			
540	SE 1/4	577	1	Kitchen	Container Glass	light blue/green bottle fragment			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
540	SE 1/4	577	9	Kitchen	Container Glass	light olive bottle fragment			
540	SE 1/4	577	8	Kitchen	Container Glass	olive bottle fragment			
540	SE 1/4	577	5	Personal	Combs	vulcanite comb tine			
540	SE 1/4 Zones 2,3	577	1	Tobacco Pipe	Tobacco Pipe	unglazed redware			
540	SE 1/4	578	1	Architectural	Brick	handmade	5.6 g		
540	SE 1/4	578	1	Architectural	Nail	medial, cut		1815-1900	
540	SE 1/4	578	1	Architectural	Nail	proximal, cut		1835-1900	
540	SE 1/4	578	5	Architectural	Nail	indeterminate			
540	SE 1/4 Z4	578	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd			
540	SE 1/4	578	18	Kitchen	Container Glass	olive bottle fragment			
540	SE 1/4	578	1	Kitchen	Container Glass	olive bottle fragment		1840-1885	
540	SW 1/4	579	1	Architectural	Brick	indeterminate	0.1 g		
540	SW 1/4	579	1	Kitchen	Container Glass	colorless indeterminate fragment			
540	SW 1/4	587	3	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4	587	1	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4	587	2	Architectural	Nail	proximal, clinched, cut		1835-1900	
540	SW 1/4	587	2	Arms	Other	lead			
540	SW 1/4	587	3	Kitchen	Container Glass	light blue/green indeterminate fragment			
540	SW 1/4 Zone 2	588	1	Activities	Hardware	brass washer?	11.2 mm		
540	SW 1/4 Zone 2	588	2	Activities	Other	ferrous metal fragments			
540	SW 1/4 Zone 2	588	4	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SW 1/4	588	1	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4	588	6	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4 Z2	588	1	Kitchen	Ceramic	salt glazed stoneware bowl sherd		1780-1900	
540	SW 1/4	588	1	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4	588	9	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4	588	1	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4	588	3	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4 Zone 2	588	2	Tobacco Pipe	Tobacco Pipe	earthenware face pipe			
540	SW 1/4	589	1	Activities	Other	cinder			

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
540	SW 1/4 Zone 3	589	7	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SW 1/4	589	1	Architectural	Window Glass	blue/green	1.53 mm		
540	SW 1/4	589	2	Architectural	Nail	proximal, pulled, cut		1835-1900	
540	SW 1/4	589	3	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4 Z3	589	1	Kitchen	Ceramic	alkaline glazed stoneware jug sherd		1780-1900	
540	SW 1/4	589	1	Kitchen	Container Glass	light blue/green bottle fragment			
540	SW 1/4	589	3	Kitchen	Container Glass	light blue/green indeterminate fragment			
540	SW 1/4	589	5	Kitchen	Container Glass	light olive indeterminate fragment			
540	SW 1/4	589	1	Kitchen	Container Glass	olive bottle fragment			
540	SW 1/4	590	1	Architectural	Brick	handmade	149.4 g		
540	SW 1/4	590	1	Kitchen	Container Glass	olive bottle fragment			
540	SW 1/4	591	3	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4 Zone 5	591	1	Tobacco Pipe	Tobacco Pipe	earthenware face pipe			
540	SW 1/4	592	1	Kitchen	Container Glass	olive indeterminate fragment			
540	SW 1/4 Zone 5	594	3	Activities	Other	ferrous fragments			very small fragments
540	SW 1/4	594	2	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4	594	1	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4 Zone 6	601	1	Activities	Other	ferrous metal fragment			
540	SW 1/4 Zone 6	601	1	Activities	Other	indeterminate metal fragment			
540	SW 1/4 Zone 6	601	9	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SW 1/4	601	3	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4	601	8	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4 Z 6 N 1/2	601	1	Arms	Ammunition	.31 cal round shot	0.3195		
540	SW 1/4	601	1	Clothing	Button	badly corroded	18.45 mm		
540	SW 1/4	601	1	Clothing	Button	4 hole porcelain	10.95 mm	1840-	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
540	SW 1/4 Z6 N 1/2	601	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
540	SW 1/4 Z6 N 1/2	601	1	Kitchen	Ceramic	salt glazed stoneware indeterminate sherd		1780-1900	
540	SW 1/4 Z6 N 1/2	601	2	Kitchen	Ceramic	salt glazed stoneware jug sherd		1780-1900	
540	SW 1/4	601	1	Kitchen	Container Glass	colorless indeterminate fragment			
540	SW 1/4 Zone 6	602	6	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SW 1/4	602	5	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4	602	12	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4 Z 6 S 1/2	602	1	Arms	Ammunition	.54 cal Minie ball	0.5205		
540	SW 1/4 Z6 S 1/2	602	6	Kitchen	Ceramic	salt glazed stoneware jug sherd		1780-1900	
540	SW 1/4 Z6 S 1/2	602	1	Kitchen	Ceramic	salt glazed stoneware jug sherd		1780-1900	
540	SW 1/4	602	1	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4	602	1	Kitchen	Container Glass	light aqua indeterminate fragment			
540	SW 1/4	602	2	Kitchen	Container Glass	light olive indeterminate fragment			
540	SW 1/4 Zone 6	602	1	Tobacco Pipe	Tobacco Pipe	earthenware face pipe			
540	SW 1/4 Zone 6	603	5	Activities	Other	ferrous metal fragments			
540	SW 1/4 Zone 6	603	6	Activities	Sheet Tin/Tinned Iron	tin fragments			
540	SW 1/4	603	2	Architectural	Brick	handmade	1.9 g		
540	SW 1/4	603	1	Architectural	Window Glass	blue/green	1.47 mm		
540	SW 1/4	603	1	Architectural	Nail	medial, cut		1815-1900	
540	SW 1/4	603	2	Architectural	Nail	proximal, cut		1835-1900	
540	SW 1/4 Z6	603	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
540	SW 1/4 Z6	603	2	Kitchen	Ceramic	salt glazed stoneware jug sherd		1780-1900	
540	SW 1/4	603	4	Kitchen	Container Glass	blue/green bottle fragment			

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
540	SW 1/4	603	1	Kitchen	Container Glass	light aqua bottle fragment			
540	SW 1/4	603	1	Kitchen	Container Glass	light olive bottle fragment			
540	SW 1/4	603	3	Kitchen	Container Glass	olive bottle fragment			
540	SW 1/4	604	1	Architectural	Nail	proximal, cut		1835-1900	
540	S 1/2 Z 6	604	2	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
540	SW 1/4	604	1	Personal	Combs	vulcanite comb tine			
540	NE 1/4	605	1	Kitchen	Container Glass	colorless indeterminate fragment			
540	NE 1/4	620	2	Architectural	Nail	proximal, cut		1835-1900	
540	NE 1/4	620	1	Architectural	Nail	medial, cut		1815-1900	
540	NE 1/4	620	1	Architectural	Nail	whole, unaltered, cut	12 p	1835-1900	
540	NE 1/4	620	1	Kitchen	Container Glass	light olive bottle fragment			
540	NE 1/4 Z2	621	3	Kitchen	Ceramic	salt glazed stoneware bowl sherd		1780-1900	
540	NE 1/4	621	1	Kitchen	Container Glass	olive bottle fragment			
540	NE 1/4	622	1	Kitchen	Container Glass	olive bottle fragment			
540	NE 1/4	622	1	Kitchen	Container Glass	olive indeterminate fragment			
540	NE 1/4	624	1	Kitchen	Container Glass	olive bottle fragment			
540	NE 1/4	624	3	Kitchen	Container Glass	olive indeterminate fragment			
540	NW 1/4	638	2	Architectural	Nail	medial, cut		1815-1900	
540	NW 1/4	638	4	Architectural	Nail	proximal, cut		1835-1900	
540	NW 1/4	638	1	Architectural	Nail	proximal, pulled, cut		1835-1900	
540	NW 1/4 Z 1	638	1	Arms	Other	sheet lead			
540	NW 1/4 Z1	638	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
540	NW 1/4	639	4	Architectural	Nail	proximal, cut		1835-1900	
540	NW 1/4 Z 2	639	1	Arms	Other	sheet lead			
540	NW 1/4 Z2	639	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
540	NW 1/4 Zone 2	640	2	Activities	Other	ferrous wire fragments			
540	NW 1/4	640	1	Architectural	Nail	proximal, cut		1835-1900	
540	NW 1/4	643	1	Kitchen	Container Glass	olive bottle fragment			
547	N 1/2	721	1	Architectural	Nail	whole, unaltered, cut	9 p	1835-1900	

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
547	S 1/2	754	1	Kitchen	Container Glass	olive bottle fragment			
547	S 1/2	754	2	Kitchen	Container Glass	olive bottle fragment			
547	N 1/2	723	2	Kitchen	Container Glass	olive bottle fragment			
547	N 1/2	723	2	Kitchen	Container Glass	olive bottle fragment			
552	N 1/2	725	1	Architectural	Nail	proximal, cut		1835-1900	
553	E 1/2	710	1	Activities	Hardware	"U" staple			
553	E 1/2	710	1	Clothing	Button	corroded	19.6 mm		
553	W 1/2	713	1	Activities	Other	ferrous object			
553	W 1/2	713	2	Architectural	Brick	handmade	66.2 g		
553	W 1/2	713	1	Architectural	Nail	proximal, cut		1835-1900	
553	Profile	715	1	Activities	Tools	ferrous shovel blade			conserved
272A	S 1/2	163	1	Architectural	Brick	handmade	120.9 g		
272A	S 1/2	163	1	Architectural	Brick	handmade	502.1 g		
272A	N 1/2	164	2	Personal	Combs	vulcanite comb tine			
371A	E 1/2	366	1	Architectural	Nail	proximal, cut		1835-1900	
372A	Section 1	361	1	Architectural	Brick	handmade	5.6 g		
372A	Sect 1	361	1	Kitchen	Ceramic	undecorated hotelware indeterminate sherd		lt19th- mid20th	
372B	Section 2	363	1	Architectural	Nail	medial, cut		1815-1900	
372C	W 1/2-HEAVY FRACTION	359	1	Arms	Ammunition	percussion cap			
372C	E 1/2	364	1	Architectural	Nail	proximal, cut		1835-1900	
372C	E 1/2	364	1	Architectural	Nail	distal, cut		1815-1900	
372C	E 1/2	364	1	Architectural	Nail	whole, pulled, cut	6 p	1835-1900	
372C	E 1/2	364	1	Architectural	Nail	whole, clinched, cut	10 p	1835-1900	
372C	E 1/2	364	1	Arms	Accoutrements	tin canteen spout			
372C	W 1/2	365	1	Architectural	Nail	medial, cut		1815-1900	
372D	Middle 1/3	376	1	Activities	Other	ferrous fragments			very small fragments
373A	Middle 1/3	345	1	Architectural	Brick	handmade	10.5 g		
373A	Middle 1/3	345	1	Kitchen	Ceramic	undecorated vitrified indeterminate sherd			
373A	Middle 1/3	345	3	Kitchen	Container Glass	colorless indeterminate fragment			
373A	West 1/3	349	1	Architectural	Brick	handmade	0.5 g		
380C	N 1/2	379	2	Architectural	Brick	handmade	32.2 g		

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
380C	N 1/2-HEAVY FRACTION	380	1	Arms	Ammunition	percussion cap			
458A	N 1/2	465	1	Kitchen	Container Glass	amber bottle fragment			
67A	N 1/2	265	2	Kitchen	Container Glass	olive bottle fragment			
67A	S 1/2	269	1	Kitchen	Container Glass	olive bottle fragment			
95A	All	94	1	Architectural	Nail	proximal, clinched, cut		1835-1900	
95A	All	94	2	Architectural	Nail	medial, cut		1815-1900	
95A	SURFACE	94	1	Arms	Ammunition	.64 cal round ball	0.6455		
95A	N 1/2	95	1	Architectural	Nail	proximal, cut		1835-1900	
95A	N 1/2	95	3	Architectural	Nail	medial, cut		1815-1900	
95A	S 1/2	96	2	Architectural	Nail	proximal, cut		1835-1900	
95A	S 1/2	96	1	Architectural	Nail	distal, cut		1815-1900	
95A	S 1/2	96	1	Arms	Ammunition	.64 cal round ball	0.64		
95A	S 1/2	98	1	Architectural	Brick	indeterminate	0.1 g		
GSC		554	1	Kitchen	Ceramic	hand painted, early palette pearlware indeterminate sherd		1795-1815	
GSC		756	1	Kitchen	Ceramic	undecorated hotelware plate sherd		1940s-1950s	
GSC		757	1	Kitchen	Ceramic	blue shell edge cc ware plate sherd		1830-1860	
GSC		757	1	Kitchen	Ceramic	spatter cc ware holloware sherd		1830-1860	
GSC		757	1	Kitchen	Ceramic	blue transfer print hard paste porcelain cup sherd		1900s-	
GSC		757	1	Kitchen	Ceramic	undecorated hotelware bowl sherd		1940s-1950s	
GSC		757	1	Kitchen	Ceramic	undecorated hotelware holloware sherd		1909-	
GSC		757	1	Kitchen	Ceramic	undecorated hotelware mug sherd		1909-	
GSC		757	1	Kitchen	Ceramic	undecorated hotelware plate sherd		1916-1952	
GSC		757	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
GSC		757	1	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
GSC		757	1	Kitchen	Container Glass	colorless bottle fragment			
GSC		757	1	Kitchen	Container Glass	olive bottle fragment			
GSC		757	2	Personal	Toys	swirled glass marbles			
GSC	1.5 m E of F554	758	1	Kitchen	Ceramic	polychrome tin glazed earthenware int sherd			
GSC	GSC	759	3	Kitchen	Ceramic	alkaline glazed stoneware indeterminate sherd		1780-1900	
GSC	GSC	759	1	Kitchen	Ceramic	blue broadline stoneware bowl sherd		lt19th- mid20th	
GSC		759	1	Kitchen	Container Glass	olive bottle fragment			
GSC		759	2	Kitchen	Container Glass	olive bottle fragment			
GSC		759	1	Kitchen	Container Glass	olive bottle fragment			
GSC	Plow zone	762	1	Kitchen	Container Glass	aqua bottle fragment			
GSC		762	1	Kitchen	Container Glass	aqua bottle fragment			
near 540	Base of PZ	565	1	Clothing	Other Fasteners	ferrous buckle fragment			
4	E 1/2	750	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
4	E 1/2	750	1	Prehistoric	Lithic	Shatter		Indt.	White quartz
95	SE 1/4, L. 2	765	1	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
151	N 1/2, Z. II	571	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
212	N 1/2	25	3	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
215	W 1/2	18	3	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
216	S 1/2	26	1	Prehistoric	Lithic	Scraper		Indt.	Banded chert
217	W 1/2	270	1	Prehistoric	Lithic	Preform		Indt.	Dark, banded gray rhyolite
223	SE 1/4	53	1	Prehistoric	Lithic	Flake		Indt.	Large, primary flake with cortex
223	SE 1/4	53	1	Prehistoric	Lithic	PP/K		Middle Archaic	Morrow Mountain, lt gray rhyolite, poss. Retouched into drill
239	SW 1/2	126	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
278	W 1/2, Lv. 3	208	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
297	S 1/2	199	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
346	S 1/2	338	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
373	NE 1/4, E. portion	327	1	Prehistoric	Lithic	Cobble		Indt.	Poss. Pecked cobble or hammerstone
376	S 1/2	357	3	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
406	N 1/2	502	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
421	E 1/2	408	2	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
425	SW 1/4, Z. III	424	1	Prehistoric	Lithic	Flake		Indt.	Greenish-gray rhyolite
425	NW 1/4, Z. I, IV	485	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
425	NW 1/4, Z. IX	488	1	Prehistoric	Lithic	Flake		Indt.	Large, primary flake, white rhyolite
447	S 1/2	426	1	Prehistoric	Lithic	PP/K		Early Archaic	Guilford, Round Base, Gray rhyolite
451	W 1/2	478	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
470	SW 1/4	425	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
471	N 1/2	513	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
479	SW 1/4	527	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
479	SW 1/4	527	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
479	SW 1/4	527	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
479	SW 1/4	527	1	Prehistoric	Lithic	Shatter		Indt.	White quartz
479	NW 1/4	529	1	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
479	NW 1/4	530	3	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
479	NW 1/4	530	2	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
479	NW 1/4	530	2	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
481	S 1/2	524	3	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
481	S 1/2	524	1	Prehistoric	Lithic	Flake		Indt.	White chert
481	N 1/2	525	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
481	N 1/2	526	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
481	N 1/2	526	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
485	Sect. I	537	3	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
485	Sect. I	537	3	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
485	Sect. II	539	2	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
485	Sect. II	539	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
485	Sect. IV	549	5	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
485	Sect. IV	549	1	Prehistoric	Lithic	Flake		Indt.	White quartz
485	Sect. V	551	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
485	Sect. V	551	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
485	Sect. V	551	3	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
485	Sect. V	551	1	Prehistoric	Lithic	Flake		Indt.	White quartz
485	Sect. V	551	1	Prehistoric	Lithic	Flake		Indt.	White chert
486	E 1/2	533	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
486	E 1/2	533	1	Prehistoric	Lithic	Flake		Indt.	Greenish-gray rhyolite
486	E 1/2	533	2	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
486	W 1/2	534	5	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
486	W 1/2	534	1	Prehistoric	Lithic	Shatter		Indt.	White quartz
486	W 1/2	534	1	Prehistoric	Lithic	Shatter		Indt.	Pink quartzite
486	E 1/2	541	5	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
486	S. Sect., W 1/2	542	2	Prehistoric	Lithic	Shatter		Indt.	White quartz
493	NW 1/4	708	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
493	NW 1/4	708	1	Prehistoric	Lithic	Flake		Indt.	Dark gray rhyolite
502	S 1/2, Z. 1	609	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
514	N 1/2, Z. 1	742	1	Prehistoric	Lithic	Flake		Indt.	White quartz
518	E 1/4	569	2	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
518	E 1/4	569	1	Prehistoric	Lithic	Shatter		Indt.	Indt. Material
518	150-230 cmbd	697	1	Prehistoric	Lithic	Scraper		Indt.	Poss. Round scraper, gray rhyolite
525	Sect. II	586	1	Prehistoric	Lithic	Debitage		Indt.	Lt. gray rhyolite

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
525	Sect. II	586	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
525	Sect. II	586	1	Prehistoric	Lithic	Flake		Indt.	White chert
532	W 1/2, Z. 1	681	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
532	W 1/2, Z. I	681	1	Prehistoric	Lithic	Flake		Indt.	Brown cortex
532	W 1/2, Z. 4	686	2	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
532	W 1/2	690	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
540	SE 1/4	575	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
540	SW 1/4, Z. 1	587	1	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
540	NE 1/4, Z. 1	620	1	Prehistoric	Lithic	Flake		Indt.	Large, primary flake with cortex
540	NW 1/4, Z. 2	639	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
GSC	Base of PZ	554	1	Prehistoric	Lithic	PP/K		Early Archaic	Kirk Corner-Notched, Lt gray rhyolite
GSC		757	1	Prehistoric	Lithic	Biface		Indt.	Partial biface, lt. gray rhyolite
GSC		757	1	Prehistoric	Lithic	Flake		Indt.	Gray rhyolite
GSC		757	1	Prehistoric	Lithic	Shatter		Indt.	Deep serration on one edge, dark gray rhyolite
GSC		757	1	Prehistoric	Lithic	Shatter		Indt.	Fine serration on one end, lt. gray rhyolite
GSC		757	1	Prehistoric	Lithic	Utilized Flake		Indt.	Fine serration on one edge, gray rhyolite
GSC		757	1	Prehistoric	Lithic	Utilized Flake		Indt.	Fine serration on one edge, gray rhyolite
GSC		757	1	Prehistoric	Lithic	Utilized Flake		Indt.	Poss. Unifacial scraper, banded gray rhyolite
GSC		759	1	Prehistoric	Lithic	Biface		Indt.	Partial biface, white quartz

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Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
GSC		759	1	Prehistoric	Lithic	Flake		Indt.	Banded gray rhyolite
GSC		759	1	Prehistoric	Lithic	Flake		Indt.	Lt. gray rhyolite
GSC		759	1	Prehistoric	Lithic	PP/K		Lt. Woodland-Mississippian	Partial Madison, dark gray rhyolite, serrated edges
GSC		759	1	Prehistoric	Lithic	Scraper		Indt.	Dark gray rhyolite
93	SW 1/4	106	2	Prehistoric	Ceramic	Cape Fear, Fabric Marked			Sand tempered
151	N 1/2, Z. II	568	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
151	Zone I	570	4	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
151	N 1/2, Zone II	571	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
212	S 1/2	14	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
212	N 1/2	25	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
216	N 1/2	35	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
217	E 1/2	294	1	Prehistoric	Ceramic	Indt.		Indt.	Rim, grit tempered
236	S 1/2	128	2	Prehistoric	Ceramic	Indt.		Indt.	1 vessel, grit tempered
286	E 1/2	183	1	Prehistoric	Ceramic	Cape Fear, Cord Marked			Sand/grit tempered
348	S 1/2	335	1	Prehistoric	Ceramic	Indt.		Indt.	Grit tempered
352	E 1/2	353	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
415	SE 1/4	401	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
425	SE 1/4	400	5	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
425	NW 1/4	485	1	Prehistoric	Ceramic	Indt.		Indt.	Rim, sand tempered
443	N 1/2	421	1	Prehistoric	Ceramic	Cape Fear, Cord Marked			Notched rim, sand/grit tempered
447	S 1/2	426	5	Prehistoric	Ceramic	Cape Fear, Cord Marked			Sand/grit tempered
447	N 1/2	427	1	Prehistoric	Ceramic	Cape Fear, Cord Marked			Sand/grit tempered
451	W 1/2	478	1	Prehistoric	Ceramic	Cape Fear, Cord Marked			Sand/grit tempered
451	W 1/2	478	1	Prehistoric	Ceramic	Cape Fear, Cord Marked			Sand tempered

Appendix B: Recovered Materials Inventory

Feature	Location	Cat #	N	Group	Class	Description	Metrics	Range	Notes
471	N 1/2	513	2	Prehistoric	Ceramic	Indt.		Indt.	Grit tempered
471	S 1/2	515	3	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
473	N 1/2	514	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
479	SW 1/4	527	1	Prehistoric	Ceramic	Indt.		Indt.	Grit tempered
479	SE 1/4	528	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
479	NE 1/4	532	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
479	NE 1/4	532	1	Prehistoric	Ceramic	Punctate			Thinned rim, sand tempered
485	Sect. 6	553	1	Prehistoric	Ceramic	Deptford, Check Stamped			Sand tempered
485	Sect. 6	553	1	Prehistoric	Ceramic	Fabric Marked			Rim, sand tempered
485	Sect. 3	546	1	Prehistoric	Ceramic	Indt.		Indt.	Faint marks, sand tempered
485	Section 1	537	12	Prehistoric	Ceramic	Indt.		Indt.	Grit tempered
485	Section 2	539	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
485	Section 5	551	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
485	Section 5	551	2	Prehistoric	Ceramic	Indt.		Indt.	Grit tempered
486	W 1/2	534	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
502	NE 1/4	613	1	Prehistoric	Ceramic	Cape Fear, Fabric Marked			Sand/grit tempered
502	NW 1/2	608	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
502	N 1/2	630	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
514	N 1/2	743	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
514	N 1/2, Zone V	745	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
518	NW 1/2, Z. A, B,C	596	5	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
527	Sect. 2	559	3	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
527	Sect. 2	559	1	Prehistoric	Ceramic	Indt.		Indt.	Rim, sand tempered
532	E 1/2	674	4	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
532	E 1/2	677	3	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
532	W 1/2	681	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
534	N 1/2	696	2	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
535	S 1/2	660	1	Prehistoric	Ceramic	Thoms Creek Punctate			Sand tempered
535	S 1/2	666	3	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered
553	W 1/2	713	1	Prehistoric	Ceramic	Indt.		Indt.	Sand tempered

APPENDIX C
POSTCRANIAL METRICS

Appendix C: Postcranial Metrics

in mm. Table 1. Postcranial Metrics from Burial 1

Measurement (in mm)	Left	Right
Clavicle - Maximum Length	160	
Scapula - Glenoid Cavity Height	37	
Humerus - Maximum Length	355	335
Humerus - Epicondylar Breadth		59
Radius - Maximum Length	262	270
Ulna - Maximum Breadth Olecranon	26	
Ulna - Minimum Breadth Olecranon	24	
Ulna - Maximum Width Olecranon	33	
Ulna - Olecranon-Radial Notch	25	
Ulna - Olecranon-Coronoid Length	25	
Femur - Maximum Length	495	492
Femur - Subtrochanteric Anterior/Posterior Diameter	31	30
Femur - Subtrochanteric Medial/Lateral Diameter	34	32
Femur - Anterior/Posterior Diameter at Midshaft	33	33
Femur - Medial/Lateral Diameter at Midshaft	28	30
Femur - Maximum Vertical Diameter of Head	49	49
Femur - Maximum Horizontal Diameter of Head	49	
Femur - Epicondylar Breadth	83	
Femur - Bicondylar Breadth	70	
Femur - Minimum Vertical Diameter of Neck	34	33
Femur - Circumference at Midshaft	99	97
Tibia - Condylar-Malleolar Length	395	
Tibia - Maximum Breadth Proximal Epiphysis	77	
Tibia - Anterior/Posterior Breadth at Nutrient Foramen	45	
Tibia - Medial/Lateral Breadth at Nutrient Foramen	31	
Tibia - Position of Nutrient Foramen	117	
Tibia - Circumference at Nutrient Foramen	115	
Fibula - Maximum Length		398
Measurement estimate =		

APPENDIX D
FAUNAL WEIGHTS

Appendix D. Faunal Weights

Feature	Weight (g)	Feature	Weight (g)	Feature	Weight (g)
4	297.0	272	270.7	432	23.2
67A	2.7	272A	38.5	435	23.7
70	628.2	278	1604.7	443	14.1
83	822.6	286	353.8	449	262.2
84	1.0	295	1197.5	450	29.1
85	96.0	304A	209.5	451	8547.7
86	270.5	304A,304B	220.6	452	541.6
88	11.8	304B	193.3	455	3.2
89	643.3	305	166.9	458	21.9
95A	12.7	313	4.8	466	3.5
97	34.6	325	1539.7	469	114.0
98	178.7	338	8.8	479	77.9
100	345.8	342	85.8	484	42.1
106	0.1	343	815.7	485	156.4
107	60.5	346	437.9	486	44.3
109	7.8	348	1310.3	493	3.4
152	332.4	348B	0.1	502	60.4
204	0.1	352	37.5	507	1255.9
207	62.9	355	113.9	514	17.6
208	23.6	356	330.2	517	0.7
210	315.6	361	81.5	518	177.8
211	4.2	371	0.5	525	20.8
212	3.8	371A	72.2	527	123.3
215	1061.2	372C	706.3	532	895.2
216	58.7	372D	178.0	534	1.9
217	1543.2	373	86.3	535	59.7
219	53.9	376	163.8	538	144.6
221	4.9	377	77.5	540	345.4
223	5.1	378	11.4	543	113.8
225	8.7	379	183.0	547	62.5
225A	17.5	380	98.8	550	311.4
239	1.9	380A	12.2	551	6.9
239A	111.2	380B	5.7	552	346.8
242	3960.6	380C	11.2	553	1074.1
246	34.7	399	84.5		
247	4.6	400	140.3	Total	39797.3
248	440.8	420	13.0		
260	144.0	421	10.9		
261	1010.7	425	1375.3		

APPENDIX E
BOTANICAL ANALYSIS

Appendix E. Botanical Analysis

Table E.1 Analyzed Floatation Samples from 38FL2.

Feature	Catalog Number	Sample Weight (g)	Contaminant Weight (g)	Residue Weight (g)	Plant Weight (g)	Wood Weight (g)
210	17	195.22	52.11	130.79	11.88	10.57
212	22	163.80	24.20	107.85	3.87	1.05
212	23	92.54	9.25	81.80	1.38	1.02
215	28	121.56	19.33	100.81	2.95	2.23
215	29	270.90	99.06	177.31	14.69	12.02
211	3	58.09	4.82	52.79	0.48	0.42
216	34	86.77	7.27	54.53	0.63	0.53
216	37	123.71	31.76	90.77	1.11	0.97
400	396	134.78	30.00	71.58	2.91	2.53
221	399	250.23	40.05	144.88	62.90	62.54
425	423	115.74	14.89	95.93	4.82	2.87
425	459	106.59	9.34	96.06	1.17	0.88
425	462	124.99	18.91	103.14	2.83	1.91
425	487	126.57	21.59	99.41	5.42	4.55
425	489	577.55	382.03	190.92	4.14	3.01

Table E.2 Plant Taxa Recovered from 38FL2.

Category Common Name	Scientific Name	Seasonality	Count	Weight (g)
Nuts				
Acorn	<i>Quercus</i> sp.	fall	4	0.00
Acorn cf.	<i>Quercus</i> sp. cf.	fall	6	0.00
Black walnut	<i>Juglans nigra</i>	fall	3	0.03
Hickory	<i>Carya</i> sp.	fall	13	0.09
Walnut family	Juglandaceae	fall	2	0.02
Fruits				
Grape cf.	<i>Vitis</i> sp. cf.	summer	2	0.00
Maypop	<i>Passiflora incarnata</i>	summer	4	0.00
Persimmon	<i>Diospyros virginiana</i>	fall	1	0.01
Persimmon seed cf.	<i>Diospyros virginiana</i> cf.	fall	1	0.00
Persimmon seed coat cf.	<i>Diospyros virginiana</i> cf.	fall	1	0.00
Sumac	<i>Rhus</i> sp.	fall	2	0.00
Crops				
Bean	<i>Phaseolus vulgaris</i>	late summer/fall	1	0.03
Corn kernel cf.	<i>Zea mays</i> cf.	late summer/fall	1	0.01
Miscellaneous				
Bark			131	2.22
Bark cf.			22	0.56
Bark, partially carbonized			4	0.10
Bedstraw	<i>Galium</i> sp.		1	0.00
Bedstraw cf.	<i>Galium</i> sp. cf.		5	0.00
Bud			30	0.07
Bud cf.			1	0.00
Grass family	Poaceae		1	0.00
Pine cone	<i>Pinus</i> sp.		206	0.70
Pine cone cf.	<i>Pinus</i> sp. cf.		6	0.02
Pine cone/bark			31	0.14
Pitch			578	7.76
Pitch/bark			5	0.02
Stem/twig			4	0.02
Sunflower cf., wild	<i>Helianthus</i> cf.	late summer/fall	1	0.00
Thorn			1	0.00
Unidentifiable	Unidentifiable		211	1.43
Unidentifiable seed	Unidentifiable		34	0.00
Unidentified	Unidentified		3	0.00
Unidentified fruit/seed	Unidentified		1	0.05
Unidentified seed	Unidentified		6	0.00
Wax myrtle cf.	<i>Myrica</i> sp.		1	0.00
Wood				107.10
Wood, partially carbonized				0.83

Table E.3 Plant Remains Recovered from Floatation Samples from 38FL2.

Feature	Catalog Number	Plant Weight (g)	Wood Weight (g)	Common Name	Count	Weight (g)
210	17	11.88	10.57	Acorn cf.	1	0.00
				Bark	24	0.16
				Bean	1	0.03
				Black walnut	3	0.03
				Bud	1	0.01
				Persimmon	1	0.01
				Persimmon seed cf.	1	0.00
				Pine cone	27	0.11
				Pitch	95	0.67
				Sunflower cf.	1	0.00
				Unidentifiable	55	0.29
				Unidentifiable seed	2	0.00
211	3	0.48	0.42	Acorn cf.	1	0.00
				Bedstraw cf.	1	0.00
				Pine cone	3	0.01
				Pitch	3	0.02
				Unidentifiable	4	0.03
212	22	3.87	1.05	Bark	2	0.01
				Bud	2	0.00
				Pine cone	5	0.03
				Pitch	27	2.74
				Stem	1	0.00
				Unidentifiable	10	0.04
				Unidentifiable seed	4	0.00
212	23	1.38	1.02	Bark	1	0.00
				Bedstraw	1	0.00
				Bud	2	0.00
				Maypop	3	0.00
				Pine cone	11	0.04
				Pitch	19	0.29
				Sumac	1	0.00
				Unidentifiable	5	0.03
				Unidentifiable seed	2	0.00
215	28	2.98	2.23	Acorn cf.	1	0.00
				Bedstraw cf.	1	0.00
				Bud	1	0.00
				Hickory	2	0.01
				Pine cone	6	0.02
				Pine cone/bark	5	0.04
				Pitch	27	0.21
				Unidentifiable	19	0.47
				Unidentifiable seed	1	0.00

Table E.3 (continued). Plant Remains Recovered from Floatation Samples from 38FL2.

Feature	Catalog Number	Plant Weight (g)	Wood Weight (g)	Common Name	Count	Weight (g)
215	29	14.69	12.02	Acorn cf.	1	0.00
				Bark	64	1.76
				Bedstraw cf.	1	0.00
				Bud	3	0.01
				Corn kernel cf.	1	0.01
				Hickory	1	0.01
				Pine cone	77	0.24
				Pitch	65	0.51
				Sumac	1	0.00
				Unidentifiable	29	0.13
216	34	0.63	0.53	Acorn	1	0.00
				Bark	1	0.01
				Bud	1	0.00
				Hickory	1	0.00
				Juglandaceae	1	0.01
				Maypop	1	0.00
				Pine cone cf.	1	0.00
				Pine cone/bark	5	0.02
				Pitch	15	0.06
				Unidentifiable	2	0.00
				Unidentified seed	3	0.00
216	37	1.11	0.97	Acorn	1	0.00
				Bark	1	0.04
				Bud	1	0.00
				Hickory	1	0.00
				Pine cone	4	0.02
				Pine cone cf.	2	0.01
				Pitch	1	0.01
				Unidentifiable	9	0.06
221	399	62.90	62.54	Bark	3	0.01
				Bud	5	0.01
				Grass family	1	0.00
				Hickory	5	0.05
				Pine cone	9	0.03
				Pitch	20	0.21
				Unidentifiable	14	0.05
				Unidentifiable seed	11	0.00
				Unidentified seed	1	0.00
400	396	2.91	2.53	Acorn cf.	1	0.00
				Bedstraw cf.	1	0.00
				Bud	3	0.01
				Juglandaceae	1	0.01
				Persimmon seed coat cf.	1	0.00
				Pine cone	5	0.02
				pine cone/bark	3	0.01

Table E.3 (continued). Plant Remains Recovered from Floatation Samples from 38FL2

Feature	Catalog Number	Plant Weight (g)	Wood Weight (g)	Common Name	Count	Weight (g)
425	423	4.82	2.87	Pitch	26	0.27
				Twig	2	0.01
				Unidentifiable	8	0.05
				Unidentified seed	1	0.00
				Acorn	1	0.00
				Bark	2	0.01
				Bud	3	0.01
				Bud cf.	1	0.00
				Pine cone	30	0.08
				Pitch	85	1.20
				Unidentifiable	10	0.03
				Unidentifiable seed	4	0.00
				Unidentified	1	0.00
				Unidentified fruit/seed	1	0.05
				Wood, partly carbonized	0	0.57
425	459	1.17	0.88	Bark cf.	5	0.02
				Bud	2	0.01
				Pine cone	8	0.02
				Pitch	24	0.22
				Thorn	1	0.00
				Unidentifiable	6	0.02
				Unidentified seed	1	0.00
				Wax myrtle cf.	1	0.00
				Bark	2	0.01
				Bedstraw cf.	1	0.00
425	462	2.83	1.91	Bud	1	0.00
				Hickory	2	0.02
				Pine cone	4	0.01
				Pine cone cf.	3	0.01
				Pitch	52	0.62
				Unidentifiable	15	0.08
				Unidentifiable seed	2	0.00
				Unidentified	2	0.00
				Wood, partly carbonized	0	0.17
				Acorn cf.	1	0.00
				Bark	13	0.09
				Bark, partly carbonized	4	0.10
				Bud	4	0.00
				Grape cf.	2	0.00
				Pine cone	5	0.01
425	487	5.42	4.55	Pitch	68	0.48
				Pitch/bark	5	0.02
				Unidentifiable	17	0.08
				Unidentifiable seed	6	0.00
				Wood, partly carbonized	0	0.09

Table E.3 (continued). Plant Remains Recovered from Floatation Samples from 38FL2.

Feature	Catalog Number	Plant Weight (g)	Wood Weight (g)	Common Name	Count	Weight (g)
425	489	4.14	3.01	Acorn	1	0.00
				Bark	18	0.12
				Bark cf.	17	0.54
				Bud	1	0.01
				Hickory	1	0.00
				Pine cone	12	0.06
				PIne cone/bark	18	0.07
				Pitch	51	0.25
				Twig	1	0.01
				Unidentifiable	8	0.07
				Unidentifiable seed	2	0.00